KENYA VISION 2030

Towards A Globally Competitive & Prosperous Nation

KENYA VISION 2030 FLAGSHIP PROGRAMMES AND PROJECTS

PROGRESS REPORT

(FY 2021/2022)


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FOREWORD AND ACKNOWLEDGEMENT

The Kenya Vision 2030 is an ambitious blueprint aimed at transforming the country into a newly industrialising, globally competitive and prosperous upper-middle-income nation with a high quality of life for all citizens by the year 2030. The plan is structured around five-year Medium-Term Plans (MTPs), with the current one being the MTP III, covering the period from 2018 to 2022. The overarching theme of MTP III is "Transforming Lives" through the implementation of food and nutrition security, manufacturing, universal health coverage, and affordable housing as the key priorities.

Key to tracking progress of the Vision 2030 is the Annual Flagship Programmes and Projects Progress Report, which evaluates the performance of specific transformative initiatives. Flagship programmes and projects are large-scale, sustainable endeavours with significant socio-economic impacts, including poverty reduction, employment creation, income generation, enhanced competitiveness, and promotion of equity and inclusivity. They are designed to address cross-sectoral challenges and are informed by best practices relevant to Kenya's development needs.

So far, the Vision 2030 Delivery Secretariat has compiled comprehensive reports detailing the progress of Flagship Programmes and Projects from MTP I to MTP II. In relation to MTP III, similar reports were produced annually in the Financial Years 2018/2019, 2019/2020 and 2020/2021.

This fourth annual progress report on the implementation of flagship programmes and projects within the Third Medium-Term Plan of the Kenya Vision 2030 covers the progress made during the Financial Year 2021/22. It was compiled through a consultative process, incorporating inputs from implementing Ministries, Departments and Agencies (MDAs) and other stakeholders.

It is noteworthy that Kenya has demonstrated significant progress in implementing flagship programmes and projects since 2008, with continued advancement during the FY 2021/22. Particularly notable is the progress in establishing macro-economic stability, which is crucial for raising the living standards.

Based on the experiences and insights gained so far, we will establish a framework to accelerate implementation and offer strategic guidance to achieve the Vision. In this regard, all Ministries, Counties, Departments and Agencies (MCDAs) must strive to prioritise key programmes and projects aligned with the Government's Development Agenda and the United Nations' (UN) Sustainable Development Goals.

The document also highlights the necessity of a dynamic public sector to facilitate the realisation of Vision 2030 through flagship initiatives. To ensure sustained service delivery, further reforms in the public sector including digitalisation of essential government services and enhancement of policy, legal and institutional frameworks will be advocated for.

Given the capital-intensive nature of Vision 2030 programmes and projects, we commit to strengthening partnerships with county governments, the private sector, development partners and other stakeholders to optimise outcomes. We will also explore alternative financing models to alleviate pressure on our debt portfolio. We call upon all stakeholders to fulfil their roles effectively as we collectively strive to achieve the objectives of the Vision.

I extend my sincere personal and institutional gratitude to all those who contributed to the preparation of this report. I recognise the effective participation and commitment of all Ministries, Counties, Departments and Agencies, and other stakeholders in implementing the Blueprint.

I humbly acknowledge the guidance and support provided by Prof. Njuguna S. Ndung'u, CBS, the Cabinet Secretary of the National Treasury and Economic Planning, and Mr. James Muhati, CBS, the Principal Secretary of the State Department for Economic Planning, during the development of this report.

To all individuals and organisations that contributed to this report in various ways but are not specifically mentioned, I extend my thanks.

Kenneth Mwige

MR. KENNETH MWIGE
DIRECTOR GENERAL
VISION 2030 DELIVERY SECRETARIAT

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ABBREVIATIONS AND ACRONYMS

AAG	Affirmative Action Group
AAS	Atomic Absorption Spectrometer
ABMT	Appropriate Building Materials and Technologies
ADAK	Anti-Doping Agency of Kenya
ADC	Agricultural Development Corporation
ADR	Alternative Dispute Resolution
ADRV	Anti-Doping Rules Violation
AGOA	Africa Growth and Opportunity Act
AGPO	Access to Government Procurement Opportunities
AIV	African Indigenous Vegetables
AMR	Antimicrobial Resistance
ASAL	Arid and Semi-Arid Land
ATM	Air Traffic Management
BPO	Business Process Outsourcing
CA	Communications Authority of Kenya
CAIDI	Customer Average Interruption Duration Index
CBA	Curriculum Based Assessment
CBC	Competency Based Curriculum
CBEF	County Budget and Economic Forum
CBET	Competency Based Education and Training
CBK	Central Bank of Kenya
CBR	Central Bank Rate
CCI	County Creditworthiness Initiative
CCTV	Closed Circuit Television
CCU	Critical Care Unit
CEMASTEA	Centre for Mathematics, Science and Technology Education in Africa
CHU	Community Health Unit
CIDC	Constituency Industrial Development Centre
CIS	Collective Investment Scheme
CoE	Centre of Excellence
CPI	Consumer Price Index
CRA	Commission on Revenue Allocation
DCI	Directorate of Criminal Investigations
NDEF	National Drought Emergency Fund

DLP	Defect Liability Period
DMC	Digital Media City
DTT	Digital Terrestrial Television
DWT	Deadweight Tonnage
EAC	East African Community
EACC	Ethics and Anti-Corruption Commission
EARTTDFP	East Africa Regional Transport, Trade and Development Facilitation Project
ECA	Export Credit Agency
EDE	Ending Drought Emergencies
EIA	Environmental Impact Assessment
ELISA	Enzyme Linked Immunosorbent Assay
ENSDA	Ewaso Nyiro South Development Authority
EOPS	Early Oil Pilot Scheme
EPC	Engineering, Procurement, and Construction
EPC-F	Engineering, Procurement, and Construction with Finance
EPS	Expanded Polystyrene
EPZ	Export Processing Zone
EPZA	Export Processing Zones Authority
ERP	Enterprise Resource Planning
EWER	Early Warning and Early Response
FDSE	Free Day Secondary Education
FGM	Female Genital Mutilation
FY	Financial Year
GBV	Gender Based Violence
GCCN	Government Common Core Network
GDC	Geothermal Development CompNY
GDP	Gross Domestic Product
GHRIS	Government Human Resource Information System
GoK	Government of Kenya
HCV	Heavy Commercial Vehicle
HELB	Higher Education Loans Board
HH	Household
HINI	High Impact Nutrition Intervention
HISP	Health Insurance Subsidy
HLI	Historical Land Injustice
HRD	Human Resource Development

HSNP	Hunger Safety Net Programme
IAEA	International Atomic Energy Agency
IC3	Integrated Command and Control Centre
ICAO	International Civil Aviation Organization
ICD	Inland Container Depot
ICT	Information and Communication Technology
ICTA	Information and Communication Technology Authority
ICU	Intensive Care Unit
IFAD	International Fund for Agricultural Development
IPRS	Integrated Population Registration System
IT	Information Technology
IT/OP	Information Technology/Operational Technology
ITES	Information Technology Enabled Services
ITS	Intelligent Transport System
JKIA	Jomo Kenyatta International Airport
KAGRC	Kenya Animal Genetic Resource Centre
KALRO	Kenya Agricultural and Livestock Research Organization
KCAA	Kenya Civil Aviation Authority
KDF	Kenya Defence Forces
KEBS	Kenya Bureau of Standards
KE-CIRT	Kenya Computer Incident Response Team-Coordination Centre
KEFRI	Kenya Forest Research Institute
KEMFRI	Kenya Marine and Fisheries Research Institute
KEMRI	Kenya Medical Research Institute
KENAS	Kenya Accreditation Service
KenGen	Kenya Electricity Generating Company
KenInvest	Kenya Investment Authority
KeNHA	Kenya National Highways Authority
KeNIA	Kenya National Innovation Agency
Kenya-AIST	Kenya Advanced Institute of Science and Technology
KETRACO	Kenya Electricity Transmission Company
KEWI	Kenya Water Institute
KHIS	Kenya Health Information System
KICC	Kenyatta International Convention Centre
KICD	Kenya Institute of Curriculum Development
KIPI	Kenya Industrial Property Institute

KIRDI	Kenya Industrial Research and Development Institute
KISIP	Kenya Informal Settlement Improvement Project
KITI	Kenya Industrial Training Institute
KM	Kilometre
KMD	Kenya Meteorological Department
KMHFL	Kenya Master Health Facility List
KMRC	Kenya Mortgage Refinance Company
KMTC	Kenya Medical Training College
KNAP	Kenya National Action Plan
KNBS	Kenya National Bureau of Statistics
KNEC	Kenya National Examinations Council
KNH	Kenyatta National Hospital
KNLRD	Kenya National Learners Records Database
KNQF	Kenya National Qualification Framework
KNRR	Kenya Nuclear Research Reactor
KNSL	Kenya National Shipping Line
KODI	Kenya Open Data Initiative
KOMEX	Kenya National Multi-Commodities Exchange
KPA	Kenya Ports Authority
KPLC	Kenya Power and Lighting Company
KPRL	Kanya Petroleum Refineries Limited
KQMH	Kenya Quality Model for Health
KRC	Kenya Railways Corporation
KSG	Kenya School of Government
KSh	Kenya Shilling
KURA	Kenya Urban Roads Authority
KVDA	Kerio Valley Development Authority
KWS	Kenya Wildlife Service
KYEOP	Kenya Youth Employment and Opportunities Programme
LAPSSET	Lamu Port South Sudan Ethiopia Transport
LPG	Liquified Petroleum Gas
LPO	Local Purchase Order
LVSR	Low Volume Sealed Road
MCDA	Ministries, Counties, Departments and Agencies
MDA	Ministries, Departments and Agencies
MES	Managed Equipment Service

MGR	Meter Gauge Railway
MHEL	Magiro Hydro Electricity Limited
MIA	Moi International Airport
MICE	Meetings, Incentives, Conferences and Exhibitions
MLND	Maize Lethal Necrotic Disease
MLP	Monitoring Learner Progres
MoH	Ministry of Health
MoLPP	Ministry of Land and Physical Planning
MoU	Memorandum of Understanding
MRI	Magnetic Rosonance Imaging
MSC	Mediterranean Shipping Company
MSEA	Micro and Small Enterprises Authority
MSME	Micro Small and Medium Enterprise
MT	Metric Tonne
MTRH	Moi Teaching and Referral Hospital
NCBF	National Capacity Building Framework
NACOSTI	National Commission for Science, Technology and Innovation
NCWPD	National Council for Persons with Disabilities
NCR	Nairobi Commuter Rail
NDMA	National Drought Management Authority
NEMA	National Environment Management Authority
NEMIS	National Education Management Information System
NESWS	National Electronic Single Window System
NETFUND	National Environment Trust Fund
NGAAF	National Government Affirmative Action Fund
NGAO	National Government Administration Officers
NGCDF	National Government Constituencies Development Fund
NGO	Non-Governmental Organisations
NHIF	National Health Insurance Fund
NIA	National Irrigation Authority
NIFC	Nairobi Internation Financial Centre
NITA	National Industrial Training Authority
NLC	National Land Commission
NLIMS	National Land Management Information System
NMC	National Machining Complex
NOFBI	National Optic Fibre Backbone Infrastructure

NPS	National Police Service
NTSA	National Transport and Safety Authority
NuPEA	Nuclear Power and Energy Agency
NYS	National Youth Service
ODPP	Office of the Director of Public Prosecutions
OSC	One Stop Centre
OSH	Occupational Safety and Health
OSR	Own Source Revenue
OVC	Orphans and Vulnerable Children
PAP	Project Affected Person
PCR	Polymerace Chain Reaction
PET	Pictorial Evaluation Tool
PFM	Public Finance Management
PHEOC	Public Health Emergency Operation Centre
PIDA	Programme for Infrastructure Development in Africa
PPP	Public Private Partnership
PSTR	Primary to Secondary Transition Rate
PSV	Public Service Vehicle
PWA	Person with Albinism
PWD	Person with Disability
RAP	Resettlement Action Plan
REREC	Rural Electrification and Renewable Energy Corporation
RPL	Recognition of Prior Learning
SACCO	Savings and Credit Society
SBA	School Based Assessment
SDG	Sustainable Development Goal
SDT	Sports Disputes Tribunal
SDVTT	State Department for Vocational and Technical Training
SEZ	Special Economic Zone
SEZA	Special Economic Zones Authority
SGR	Standard Gauge Railway
SME	Small and Medium Enterprise
SNE	Special Needs Education
ST&I	Science, Technology and Innovation
STEM	Science, Technology, Engineering and Mathematics
TARDA	Tana and Athi Rivers Development Authority

TEU	Twenty-foot Equivalent Unit
TLU	Tropical Livestock Unit
TPCSI	Training and Production Centre for Shoe Industry
TPD	Teachers Professional Development
TPP	Trainair Plus Programme
TSC	Teachers Service Commission
TTI	Technical Training Institute
TUE	Therapeutic Use Exemption
TVC	Technical and Vocational College
TVET	Technical, Vocational Education and Training
TWI	Trade Weighted Index
UBSUP	Up-scaling Basic Sanitation for the Urban Poor
UHC	Universal Health Coverage
UN	United Nations
UNSCR	United Nations Security Council Resolution
UoN	University of Nairobi
VAT	Value Added Tax
VCCS	Voice Communications and Control System
VLS	Voice Logging System
VTC	Vocational Training Centre
WEF	Women Enterprise Fund
WRA	Water Resources Authority
WRUA	Water Resources Users Association
WSTF	Water Sector Trust Fund
YEC	Youth Empowerment Centre
YEDF	Youth Enterprise Development Fund

DEFINITION OF SWAHILI TERMS

Boda Boda	A bicycle or motorcycle used as a taxi for carrying passengers or goods
EduAfya	A medical cover for learners in public secondary schools
Huduma Centre	One-stop-shop platform to ensure increased access to public services
Huduma Mashinani	Service right to the grassroots level
Mwananchi LPG Project	A project aimed at enhancing access to cooking gas, liquefied petroleum gas cylinders, burners, grills and hose pipes to the public/citizens affordably

EXECUTIVE SUMMARY

The Kenyan economy experienced recovery following the adverse effects of the COVID-19 pandemic that had hit the country in the FY 2019/20. The economy rebounded strongly in 2021/22 by recording a Gross Domestic Product (GDP) growth of 12.9 percent of nominal GDP from KSh 10,716.0 billion in 2020 to KSh 12,098.2 billion in 2021. This was supported by strong recovery in all economic activities except agriculture, forestry and fishing which contracted by 0.4 percent. The growth was mainly driven by the services sector, especially accommodation and food services.

Annual inflation rate measured by the Consumer Price Index (CPI) rose from 6.1 to 7.7 percent in 2022, primarily due to increased fuel and food prices. Further, interest rates remained relatively stable in 2021 at 7.0 percent, reflecting a continued accommodative monetary policy stance by the Central Bank of Kenya (CBK) and ample liquidity conditions. The Kenya shilling (KSh) exchanged at an average rate of KSh 109.65 against the US$ in 2021, a 2.9 percent depreciation, compared to KSh 106.45 in 2020. On the other hand, the cumulative remittance inflows in 2021 increased by 20.2 percent from US$ 3,094 million in 2020 to US$ 3,718 million in 2021.

During the period under review, the official and usable foreign exchange reserves remained adequate at US$ 8,495 million which is equivalent to 4.9 months of import cover as at the end of June 2022 compared to US$ 9,957 million equivalent to 6.1 months of import cover as at end of June 2021. However, the current account balance deteriorated from a deficit of KSh 510.1 billion in 2020 to a deficit of KSh 663.0 billion in 2021 due to the widening trade deficit.

Fiscal deficit reduced from 8.2 percent in 2021 to 6.2 percent in 2022 due to the fiscal consolidation plan adopted by Kenya after COVID-19 vulnerabilities. Consequently, public debt as a percentage of GDP reduced from 68.1 percent to 67.3 percent.

FOUNDATIONS FOR NATIONAL TRANSFORMATION

Under the Foundations, 1,640.87km of road comprising 891.77km of new roads and 663.1km under Low Volume Seal Roads (LVSR) were constructed. In addition, 41,134.6 kilometres of roads were rehabilitated and maintained. Under the Road Safety Programme, 414,063 boda-boda riders were registered through a boda-boda management portal; and 311,547 smart driving licenses and 183,866 stickers were issued. Sensitisation and training was also conducted for Boda Boda, Public Service Vehicle (PSV) and Heavy Commercial Vehicle (HCV) operators.

In the rail transport sub-sector, 23.5km of railway link between the Standard Gauge Railway (SGR), Metre Gauge Railway (MGR) and truck parking yard at Naivasha Inland Container Depot (ICD) was completed. A total of 6.23 million tonnes of freight was moved consisting of 5.66 million tonnes for SGR and 0.56 million tonnes for MGR. This is a 10 percent growth from the 5.78 tonnes of freight transported by rail in FY 2020/21. In the same period, the number of rail passengers grew from 4.49 million in FY 2020/21 to 6.33 million in FY 2021/22.

In the aviation sub-sector, air passengers handled increased from 4.47 million in FY 2020/21 to 8.893 million in FY 2021/22 representing 99 percent growth. Similarly, the volume of air cargo increased from 357 million kgs in FY 2020/21 to 380.157 million kgs in FY 2021/22 representing a growth of 6.5 percent. On enhancement of infrastructure, rehabilitation of pavements at the Jomo Kenyatta International Airport (JKIA) Terminal 1A for aircraft taxi lanes/ways was at 80 percent completion rate. Similarly, the rehabilitation of pavements at the Moi International Airport (MIA) was at 92 percent completion rate. The Isiolo International Airport runway was rehabilitated and extended to 1.4km, a 100 percent completion rate. Other facilities expanded and modernised during the review period include Kisumu International Airport, Nyaribo Airstrip, Kakamega Airstrip, Manda Airport, Angama Mara Airstrip, and Lanet Military Airstrip. In order to enhance safety in the aviation industry, the construction of the Regional Centre for Aviation Medicine in Nairobi was completed. To maintain the integrity of the Air Navigation Service and enhance the expeditious flow of air traffic in Kenya's airspace, a new Air Traffic Management System was installed and commissioned at the JKIA. In addition, the East African School of Aviation (EASA) completed the new requirements for recognition as a Platinum Trading Centre of Excellence TRAINAIR PLUS Programme (TPP) Member by the International Civil Aviation Organization (ICAO).

In relation to the ports sub-sector, total throughput registered 33.62 million tonnes achieving 90.1 percent of the targeted 37.3 million tonnes. Similarly, total container traffic recorded 1,403,894 Twenty-foot Equivalent Units (TEUs) against a target of 1,511,000 TEUs. The main projects in the sub-sector included completion, commissioning, and operationalisation of berth 22 of the Port of Mombasa with annual container capacity of 450,000 TEUs; development of the first three berths at the Port of Lamu with a total annual container capacity of 1.2 million TEUs; development of Kipevu Oil Terminal with a bigger terminal consisting of four berths with capacity to handle bigger vessels of up to 170,000 Deadweight Tonnes (DWT) was completed; and revamping of Kisumu Port, Phase I was completed.

With regard to power generation, capacity was increased from 2,978MW to 3,076MW. Out of this, 2,400MW or 78 percent of the total energy generated was from renewable energy sources. In addition, the number of customers connected to the grid increased from 8.3 million in FY 2020/21 to 8.9 million in FY 2021/22. On power transmission, 176.53km of transmission lines and associated sub-stations were completed against a total target of 274km. In regard to power transmission, 7,239.3km of high, medium and low voltage lines were constructed. This comprised 1,839.58km medium and high voltage lines and 5,399.74km of low voltage lines.

In order to improve universal access to Information and Communication Technology (ICT) services, a total of 2,501.5km of fibre optic was constructed to connect sub-counties, police stations and public hospitals. The improved accessibility to ICT services was demonstrated through increased internet connectivity from 95 percent to 97 percent. The increase in mobile network coverage from 97 percent in FY 2020/21 to 98 percent in FY 2021/22 was largely driven by the rollout of basic voice infrastructure 2G Connectivity in 16 unserved and underserved sub-locations. In order to enhance accessibility of government records, digitisation of Government records was piloted in the Lands Department in Nairobi and is currently being expanded to all MCDAs.

In Science, Technology and Innovation (ST&I), the number of patents and certifications issued was 510 against a target of 22. This achievement was due to the increased capacity of the Kenya Industrial Property Institute (KIPI) to process patent applications and adoption of ICT. The Centre for Nanotechnology Research was at 80 percent completion level while the construction of the Kenya Advanced Institute of Science and Technology and a Science and Technology Park at Dedan Kimathi University of Technology had just commenced. Additionally, the National Research Fund supported 114 projects at a cost of KSh.254.4 million. To boost local capacity in innovation and production of health products, the Kenya Medical Research Institute (KEMRI) developed 12 products out of which three were commercialised.

On land reforms, 411,144 title deeds were registered and issued, surpassing the planned target by 300,000 title deeds translating to an achievement of 137 percent. The National Land Management Information System (NLIMS) was developed, and Nairobi has since been digitised. In addition, digitisation of land records and automation of land processes in Murang'a is ongoing. Land registries are being constructed in Nandi, Naivasha, Samburu, Laikipia and Ngong and the Land Value Index (LVI) was completed in 12 counties against a target of 14 counties. This is in addition to 6,456 landless households that were settled. Further, guidelines for implementation of the National Spatial Plan (2015-2045) for five sectors (National Resource and Environment, Human Settlement, Economy, Infrastructure and Transport) were developed and disseminated.

As part of public sector reforms, 12.01 million customers were served through the Huduma Service Delivery platforms across the 52 Huduma Centres, Huduma Mashinani outreaches and Huduma Contact Centres. Further, 11 new services were introduced in Huduma Service Delivery Channels with MCDAs with services deployed in Huduma Centres increasing from 66 to 76. To integrate public service human resource management across National and County Governments, the automated human resources system was updated, unified human resource system was developed and the Government Human Resource Information System (GHRIS) infrastructure upgraded.

With regard to labour and employment, the unemployment rate declined from 12.3 percent in FY 2020/21 to 6.6 percent in FY 2021/22 even though the planned target of 5 percent was not achieved. Additionally, the draft National Internship Policy and guidelines were finalised, while the National Industrial Training Authority (NITA) accredited and registered 873 training institutions to facilitate provision of industrial training. Further, an Occupational Safety and Health Institute was established, and construction works were at 75.36 percent completion at the time of reporting.

In an effort to end drought related emergencies, the National Drought Emergency Fund was established through the Public Finance Management (PFM) Act, 2012 via the Public Finance Management (National Drought Emergency Fund) Regulations, 2021. Further, an online central repository for drought related information was developed.

To enhance national security, the installation of the Integrated Command, Control and Communication (IC3) Centre and installation of Phase I of surveillance cameras in Nairobi, Mombasa Metropolis, Kisumu, Eldoret and Nakuru was completed and operationalised. In addition, the Integrated Population Registration System (IPRS) was completed and operationalised with more than 300 Government agencies connected.

ECONOMIC PILLAR

This Pillar aims to achieve a sustained average economic growth rate of 10 percent per annum until 2030. Real GDP was 7.5 percent with most economic activities recording growth except agriculture, forestry and fishing activities which contracted by 0.4 percent in the review period. However, agriculture remained the dominant sector, accounting for about 22.4 percent of the overall GDP in 2021, and in enhancing food security. To improve agricultural and livestock production, the e-voucher programme for subsidised fertiliser was implemented in 38 counties; expansion of irrigation through programmes such as the National Expanded Irrigation Programme that cumulatively developed 650,000 acres that are under irrigation within the country; improvement of livestock breeding materials and equipment; and issuance of crop and livestock insurance.

The manufacturing sector grew by 6.9 percent compared to a growth of negative 0.4 percent recorded in 2020 with the contribution of the sector to GDP standing at 7.4 percent in 2021 against the MTP III target of 15 percent, accounting for 11.5 percent of the total number of people employed in the formal sector. The key projects implemented during the FY 2021/22 included the establishment, equipping and staffing of the One Stop Centre (OSC) at the Kenya Investment Authority (KenInvest); construction of an industrial warehouse at Kariokor and equipping and machine upgrade for the Training and Production Centre for Shoe Industry (TPCSI) for the leather industry; modernisation of Rivatex East Africa Limited machinery increased the daily consumption of cotton lint from four tonnes up to 14 tonnes; MSMEs were funded and equipped; promotion of agro-processing and quality control, accreditations and property rights protection were also undertaken.

The tourism sector registered a recovery in 2021 as manifested by an increase in international arrivals by 50.3 percent to 871,300 foreign tourists. Inbound tourism earnings grew to KSh. 146.5 billion from KSh. 88.6 in 2020 representing a 65.44 percent growth. In addition, hotel bed-nights occupancy expanded by 45.1 percent to 5.5 million in 2021, with 69.4 percent accounted for by domestic tourists. This growth was attributed to reopening of Kenya's source markets and relaxation of COVID-19 related travel restrictions. Some of the key projects implemented during the period under review include the improvement of national parks and game reserves; renovation of the Mama Ngina Waterfront; and enhanced tourism promotion and marketing.

On the other hand, the trade sector's contribution to GDP reduced from 8.2 percent to 8.1 percent against a target of 8.9 percent. The decline was due to reduced production of agricultural products caused by prolonged drought. The value of exports increased from KSh. 643.7 billion in 2021 to KSh. 743.7 billion in 2022, attributed to the implementation of export strategies and the Africa Growth and Opportunity Act (AGOA). One of the key projects fully implemented in the sector was the upgrading of the Kenya Trade Net System Single Window System (now referred to as the Trade Facilitation Platform) to increase efficiency.

In the financial sector, the gross national savings as a percentage of GDP increased from 6.9 percent to 15.1 percent. The annual average inflation rate rose from 6.1 percent in 2021 to 7.7 percent in 2022. This rise in inflation was as a result of the food supply chain challenges because of prolonged drought and international macroeconomic shocks. The above reasons may also explain the reduction in market capitalisation (KSh. 2,702.22 billion in FY 2020/21 to KSh. 1,939.21 billion in FY 2021/22), and equity turnover (KSh. 135.16 billion in FY 2020/21 to KSh. 121.78 billion in FY 2021/22) at the Nairobi Securities Exchange.

In the Business Process Outsourcing (BPO) sector, implementation of the Konza horizontal infrastructure, conference facility and data centre was ongoing at different stages. New investors were onboarded to the Technopolis through investor-centric programmes, conferences and meetings and over 70 percent of Phase I was sold out.

The contribution of the blue economy sector to Kenya's GDP increased from 0.5 percent in 2017 to 0.7 percent 2021. The total value of fish landed increased from 151.3 thousand tonnes in 2020 to 163.6 thousand tonnes in 2021 and the total value of fish landed increased from Ksh 26.2 billion in 2020 to KSh 30.4 billion in 2021. The value of fish and fish products exported increased from KSh. 2.8 billion in 2020 to Ksh.3.4 billion in 2021 against a target of KSh. 2.2 billion for the same period. This was achieved through implementation of various programmes related to infrastructure development, training, marketing, aquaculture development, and quality control among others.

On oil and gas, exploration of oil in Lamu Basin was conducted. In addition, the Kenya Petroleum Refineries Limited (KPRL) facilities were improved to handle crude oil with a total of 415,032 barrels of crude oil being received into its storage terminal. The first batch of 240,150 barrels was exported in August 2019 and the balance expected to be exported in September 2022. To enhance access to cooking gas, 250,000 six kg Liquified Petroleum Gas (LPG) cylinders, 72,000 2-burner cook stoves, 350,000 burners, 350,000 grills and 60,000 hose pipes were procured and distributed to low-income households through the Mwananchi LPG Project.

SOCIAL PILLAR

The main objective of the Social Pillar is to invest in the people of Kenya. The Pillar seeks to build a just and cohesive society enjoying equitable social development in a clean and secure environment. This is to be achieved through the transformation and implementation of flagship programmes and projects in six priority sectors.

Under the education and training sector, the Primary to Secondary Transition Rate (PSTR) stood at 91 percent with 3,587,081 students placed and enrolled in public secondary schools in 2021 compared to 3,289,885 in 2020. This was achieved through a myriad of interventions including implementation of the 100 percent transition policy, the Free Day Secondary Education (FDSE) programme, enforcement of the national schools re-entry guidelines, and scholarship programmes; Government capitation (KSh. 64.42 billion); recruitment of an additional 5,000 teachers; and funding for special needs inclusion. In an effort to enhance the quality of teaching and learning, a total of 3,684,604 set-books was supplied to 9,145 secondary schools and 2,020 computers supplied to 196 secondary schools. To increase the uptake of Technical, Vocational Education and Training (TVET), 14 new TVETs were completed, and 16 others were under construction, while five cottage industries were established in Vocational and Training Centres (VTCs). Further, Competency Based Curriculum (CBC) was rolled out in Grade Six in April 2022 in addition to enhancing the capacity of curriculum implementers and systems and tools for the lower grades. By the end of 2021/22, the overall implementation of the National Education Management Information System (NEMIS) was at about 80 percent, covering a total of about 9 million learners.

On student financing, 343,417 university students were awarded loans amounting to KSh. 14,711,049,571 while 17,864 vulnerable university students were awarded bursaries amounting to KSh. 137.101 million. In addition, 106,048 TVET trainees were awarded loans amounting to KSh. 3,868,061,270 while 19,696 vulnerable TVET students were awarded bursaries amounting to KSh. 100 million.

The country also made substantial progress in the health sector. There has been a steady decline in the under-five mortality and neonatal mortality rates from 52 and 22 deaths per 1000 live births in 2014 to 41 and 21 deaths per 1000 live births in 2021 respectively. Key programmes that accelerated these achievements include social health programmes such as Linda Mama free maternity cover that registered 1,186,004 mothers; Health Insurance Subsidy (HISP) Programme that covered 254,368 Orphans and Vulnerable Children (OVC) households; Older Persons and Persons with Severe Disability (OPPSD) Scheme that covered 58,800 households; and the EduAfya that enrolled 3,683,654 secondary school students. This is in addition to implementing high impact health interventions in line with the existing community health strategy in National Integrated Community Case Management (ICCM); strengthening community health units to promote healthcare interventions; and scaling-up nutrition intervention at community level.

Further, there was the enhancement of health-related infrastructure to not only improve quality of health locally but also to promote medical tourism. This included Managed Equipment Service; Kenyatta University Teaching and Referral Hospital Integrated Molecular Imaging Centre; Kenyatta National Hospital (KNH) Cancer Centre of Excellence, Uniportal Video Assisted Surgery, Histocompatibility & Immunogenetics Laboratory, KNH Day

Care Centre; Moi Teaching and Referral Hospital (MTRH) Nawiri Recovery and Skills Centre (Mental Health Services), equipping the Second Phase of Moi Teaching and Referral Hospital (MTRH) Radiotherapy Centre of Excellence in Uasin Gishu County, expansion of Intensive Care Units (ICU) to 63; equipping of Shoe4Africa Children's Hospital and Mother and Baby Hospital; Kenya Medical Training College campuses increased to cover 44 out of 47 counties; Kenya Medical Supplies Authority's Ultra Cold Chain Equipment; renovation of KEMRI laboratories; and expansion of Critical Care Unit at Mwai Kibaki Hospital.

In the environment sector, forest cover increased from 4,285,853.91 hectares or 7.24 percent of the country's land area to 5,226,356.42 hectares or 8.83 percent of the country's land area. This increment was mainly attributed to the invigorated national tree planting campaigns in the last five years and enhanced forest research in which the Kenya Forestry Research Institute (KEFRI) developed and disseminated 66 research technologies. To improve the provision of meteorological services and information for early warning, expansion and automation of data collection networks and weather observing systems was done. Monitoring and surveillance of dump sites and plastic bags initiatives were also conducted to enhance environmental conservation. Further, various initiatives were implemented to promote the adoption of renewable energy technologies in Kenya at household level.

In relation to water storage and availability, different multipurpose projects were at varying levels of implementation during the review period. Yamo Dam in Samburu County (100 percent), Karimenu Dam in Kiambu County (90 percent), Thwake Dam that straddles Kitui and Makueni counties (70 percent), Muruny-Siyoi Dam (65 percent) in West Pokot, Mwache Dam (6 percent) in Kwale/Mombasa, Bonyunyu Dam in Kisii at (10 percent preliminary), Ruiru II Dam (7.5 percent) at RAP, and Soin-Koru Multipurpose Dam (5 percent). To increase access to safely managed water and sanitation, various water supply and sewerage projects were under implementation in 16 urban areas across the country. In addition, rehabilitation and expansion of existing large water supply schemes, drilling of boreholes, water for schools and health facilities were implemented in rural areas.

In regard to wildlife conservation and management, 1,903km of fence to protect various parks across the country was constructed as well as securing corridors and registration of conservancies in Hell's Gate National Park, Lake Nakuru National Park, Swara Conservancy in Nairobi National Park, Southern Kenya Rangeland in Amboseli National Park and Chyulu National Parks. Additionally, modern anti-poaching technologies were deployed.

To ensure access to decent housing, the Government through the Affordable Housing Programme (AHP) completed the construction of 413 civil servants' units (220 in Embu and 193 in Kiambu), and 462 social housing units in Mavoko. In addition, 192 housing units for disciplined forces/services were completed (60 in Kiambu Administration Police Service, 72 in Loresho Training College, and 60 units at the National Police Service (NPS) - Rapid Deployment Unit Headquarters. In addition, to promote use of sustainable low-cost housing building materials and technologies, the National Housing Corporation (NHC) produced 50,895M^2 of Expanded Polystyrene (EPS) panels and trained 2,989 artisans and masons on the technology.

To promote empowerment of youth, women and persons living with disabilities, the Government implemented various affirmative action programmes, key among them the Women Enterprise Fund (WEF), Uwezo Fund, National Government Affirmative Action Fund (NGAAF), Youth Enterprise Development Fund (YEDF), Youth Empowerment Centres and National Youth Service (NYS). Whereas there was progress towards the realisation of gender equality, women and girls continued to experience challenges which included Gender-Based Violence (GBV), Female Genital Mutilation (FGM), and early marriages and pregnancies. To address the foregoing, besides providing access to affirmative action funds, the Government initiated measures aimed at eradicating gender-based violence. Similarly, to cushion the poor and vulnerable groups, the Government provided cash transfer to 766,935 older persons and 278,945 households taking care of OVCs under the consolidated cash transfer programme. Additionally, cash transfers were provided to 37,023 households with persons with severe disabilities. 2,322 street families were rehabilitated and reintegrated into the communities.

Further, an ultra-modern national library also known as "Maktaba Kuu" located at Upper Hill in Nairobi was completed under the Sports, Culture, and the Arts Sector. Other achievements in the sector included the completion of Phase I of the Kenya Academy of Sports; Phase I of Wang'uru Stadium; Phases I and II of Kirigiti Stadium; and Phase I of Jamhuri Sports Ground.

POLITICAL PILLAR

The Political Pillar aims at transforming the country's political governance system. During the review period, significant achievements were made in implementing the flagship projects under the two sectors: Devolution; and Governance and the Rule of Law. To entrench and support implementation of devolution, regulations to operationalise the County Governments Act, 2012 and the Intergovernmental Relations Act, 2012 were finalised and submitted to the Cabinet. Civic education campaigns on devolution were conducted in five out of the 47 counties and the Jukumu Letu Manual that guides civic education was rolled out in all counties. In addition, the Second National Capacity Building Framework (NCBF II), which focuses on county capacity building around actual service delivery, was reviewed and finalised. Further, the Kenya Law Reform Commission developed seven laws for constitutional implementation. On resource mobilisation, the counties' Own Source Revenue (OSR) was KSh. 36 billion against a target of KSh. 60 billion representing a 76.5 percent improvement from the KSh. 34 billion collected in the FY 2020/21.

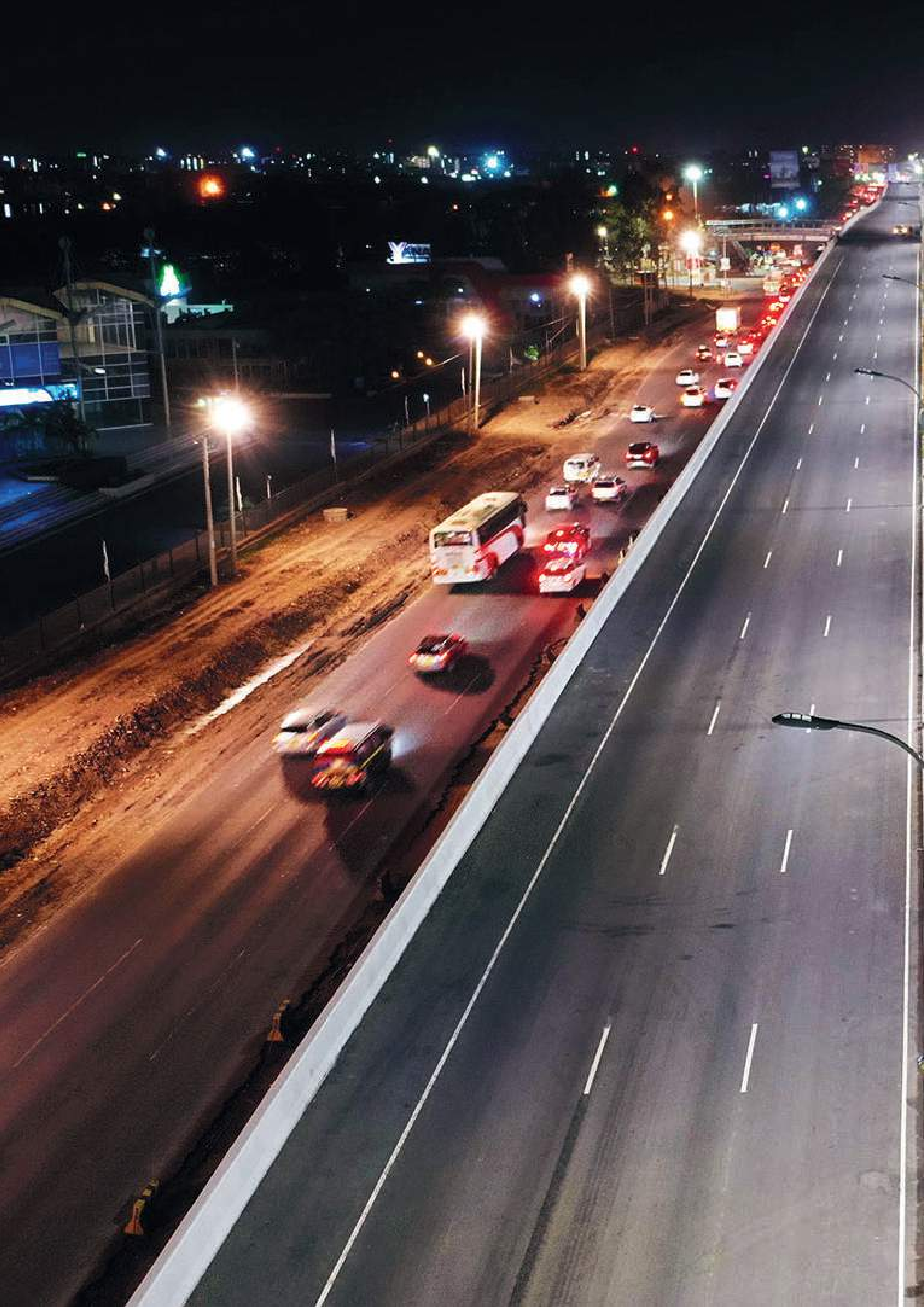
On leadership and integrity, 154 case files on corruption, economic crimes and unethical conduct were finalised and submitted to the Office of the Director of Public Prosecutions (ODPP) by the Ethics and Anti-Corruption Commission (EACC). Out of these cases, 97 were recommended for prosecution, nine (9) files recommended administrative and other actions while 48 files were for closure. Additionally, 60 cases on corruption, economic crimes and unethical conduct were finalised in court resulting in 30 convictions, 27 acquittals and three withdrawals. Further, EACC recovered public assets with an estimated value of KSh. 940 million during the period under review.

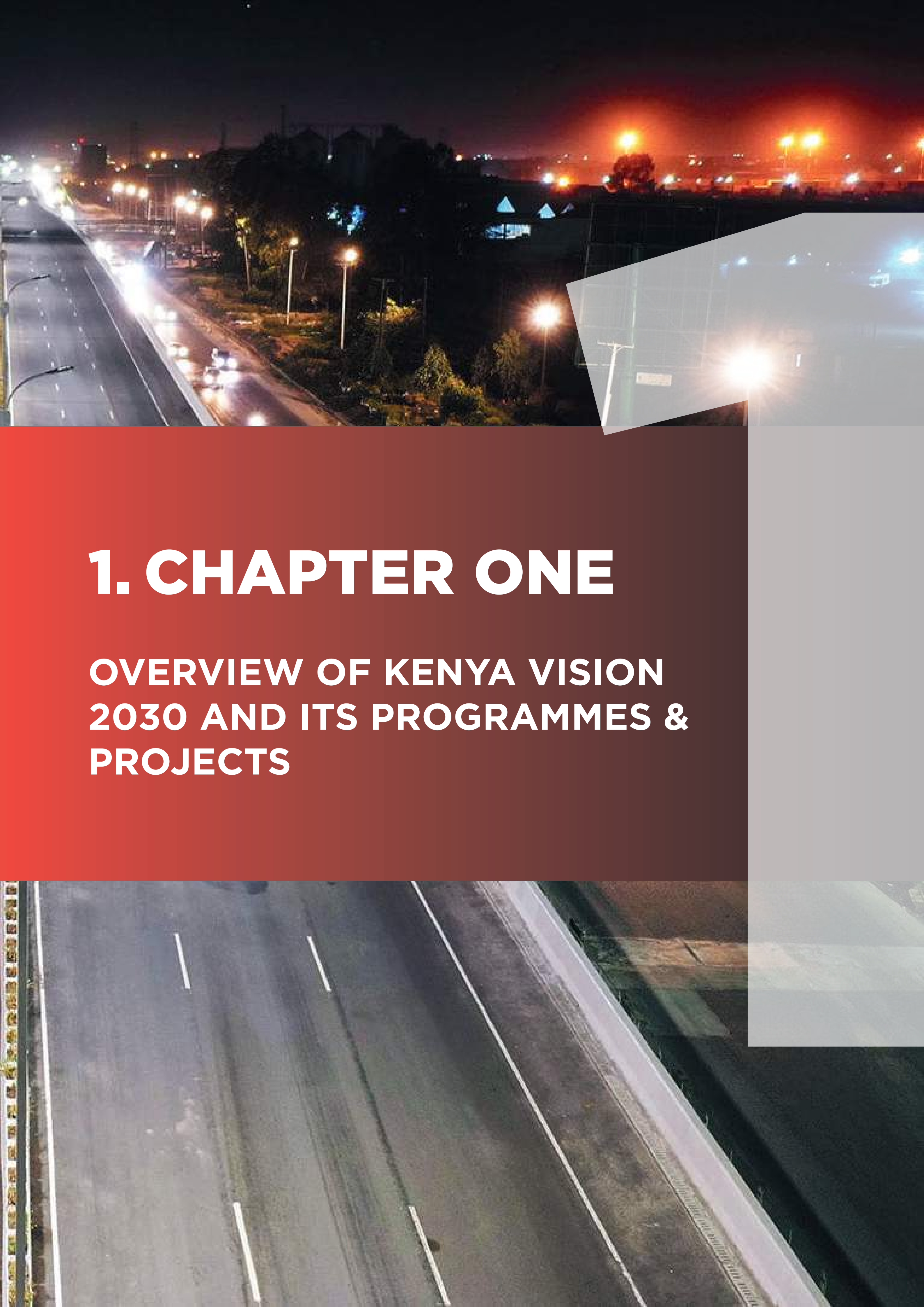
To promote national cohesion and integration, sensitisation forums were conducted in 21 counties while community dialogue, mediation and reconciliation forums were conducted in 22 counties. In addition, national conflict hotspot mapping in 47 counties was carried out and a rapid conflict analysis conducted in 15 counties to inform the subsequent targeted interventions.

To strengthen access to justice, the National Legal Aid Service offered direct legal aid services to 27,600 indigents, vulnerable and marginalised citizens. In addition, the judge-to-population ratio improved to 1:271,796 in FY 2021/22 from 1:317,095 in FY 2020/21. Further, 27 court buildings were constructed and completed; court annexed mediation was operationalised in 50 court stations; case tracking system was implemented in 128 court stations across the country; 20 tribunals transited into the Judiciary and the Judiciary Fund was operationalised. The above interventions led to the case clearance rate increasing from 83 percent in FY 2020/21 to 95 percent in FY 2021/22.

ORGANISATION OF THE REPORT

This report is organised into six chapters. Chapter one presents an overview of the Kenya Vision 2030 and its flagship programmes and projects and the methodology. Chapter two focuses on the macroeconomic framework while chapter three covers the progress of implementation of projects and programmes on the foundations for national transformation. Chapters four, five and six present the implementation status of the programmes and projects under the economic, social and political pillars respectively.





1. CHAPTER ONE

OVERVIEW OF KENYA VISION 2030 AND ITS PROGRAMMES & PROJECTS

1.1. OVERVIEW OF KENYA VISION 2030

The Kenya Vision 2030 aims to create "a globally competitive and prosperous country with a high quality of life by 2030" through three pillars - economic (moving up the economic value chain), social (investing in people) and political (growing as one nation) - underpinned by socio-economic enablers/foundations ranging from deeper economic infrastructure and human capital to better use of science and technology for innovation and a commitment to human security.

The Economic Pillar aims to achieve and sustain an average economic growth rate of 10 percent per annum until the year 2030. Eight priority sectors were identified based on their potential to drive this growth through various economic development programmes. These sectors are Tourism; Agriculture and Livestock; Trade; Manufacturing; Financial Services; BPO/Information Technology (IT) Enabled Services; Oil, Gas and Mineral Resources; and the Blue Economy.

The Social Pillar seeks to achieve a just, cohesive, and equitable society living in a clean and secure environment. This is to be realised through transformation in six key sectors namely: Education and Training; Health; Environment, Water, Sanitation and Regional Development; Population, Urbanisation and Housing; Gender, Youth and Vulnerable Groups; and Sports, Culture and the Arts.

The Political Pillar envisages a democratic political system that is issue-based, people-centred, results oriented and accountable in a democratic society that adheres to the rule of law and respects individual liberties. The Pillar also envisages a cohesive society and people centred approach to governance. This will be achieved through: Implementation of Devolution; Adherence to the Rule of Law; Electoral and Political Reforms; Democracy and Public Service Delivery; Transparency and Accountability; and Security, Peace Building and Conflict Management.

The three pillars are anchored on the enablers/ foundations of Macroeconomic Stability; Governance Reforms; Enhanced Equity and Wealth Creation Opportunities for the Poor; Infrastructural Development; Science, Technology, and Innovation (ST&I); Information and Communication Technology; Land Reforms; Labour and Employment; Security, Peace Building and Conflict Resolution; Public Sector Reforms; National Values and Ethics and Ending Drought Emergencies.

In summary, the Vision promises a "globally competitive quality education, training and research for sustainable development", "equitable, quality and affordable health care of the highest standard", "water and sanitation accessible to all in a clean, secure and sustainable environment". Further, Kenya shall be "free of HIV infection, stigma and AIDS-related deaths", while "acting towards a low carbon and climate resilient environment" supported by "an integrated and coordinated disaster risk management system". The Vision is also aligned to the East African Community (EAC) Vision 2050, Africa's Agenda 2063 and the UN Agenda 2030 - SDGs.

The Kenya Vision 2030 will be achieved through a series of five-year period MTPs. The first MTP covered the period 2008 to 2012, followed by the second from 2013 to 2017. The current MTP III covering the period 2018 to 2022 is intricately linked to the "Big Four" Agenda. Throughout the MTP III period, a total of 216 flagship programmes and projects have been identified for implementation.

Oversight on MTP implementation is carried out through various mechanisms which include Annual Progress Reports, Mid-Term Reviews, End-Term Reviews, and dedicated reports focusing on the implementation progress of flagship programmes and projects under the Kenya Vision 2030. This report specifically covers FY 2021/22 with the aim of depicting the status of implementation during this plan period. It also offers a comprehensive review of performance, serving to inform the public and stakeholders alike of the strides made towards realising Vision's goals and objectives. The report details the progress in policy, programme, and project implementation, highlights encountered challenges along with innovative strategies for addressing them. It also outlines the lessons learnt and provides recommendations for improvement. Performance evaluation is grounded on the initial targets established during the development of the third MTP.

The report's content is derived from submissions detailing the implementation status of diverse flagship programmes and projects by various MCDAs. This process is coordinated by the Vision 2030 Delivery Secretariat, which oversees the compilation and analysis of submissions from MDAs. This coordination involves consultations with a range of state and non-state actors. The compiled information undergoes a stakeholder validation process to foster enhanced ownership and ensure broader endorsement of the findings and conclusions.

1.2. ORGANISATION OF THE REPORT

This report is organised into seven chapters. Chapter one presents an overview of the Kenya Vision 2030 and its flagship programmes and projects, and the methodology used to prepare the report. Chapter two focuses on the macroeconomic framework while chapter three covers discussion on the progress of implementation of flagship programmes and projects under the foundations for national transformation. Chapters four, five and six provide implementation status of flagship programmes and projects under the Economic, Social, and Political Pillars respectively.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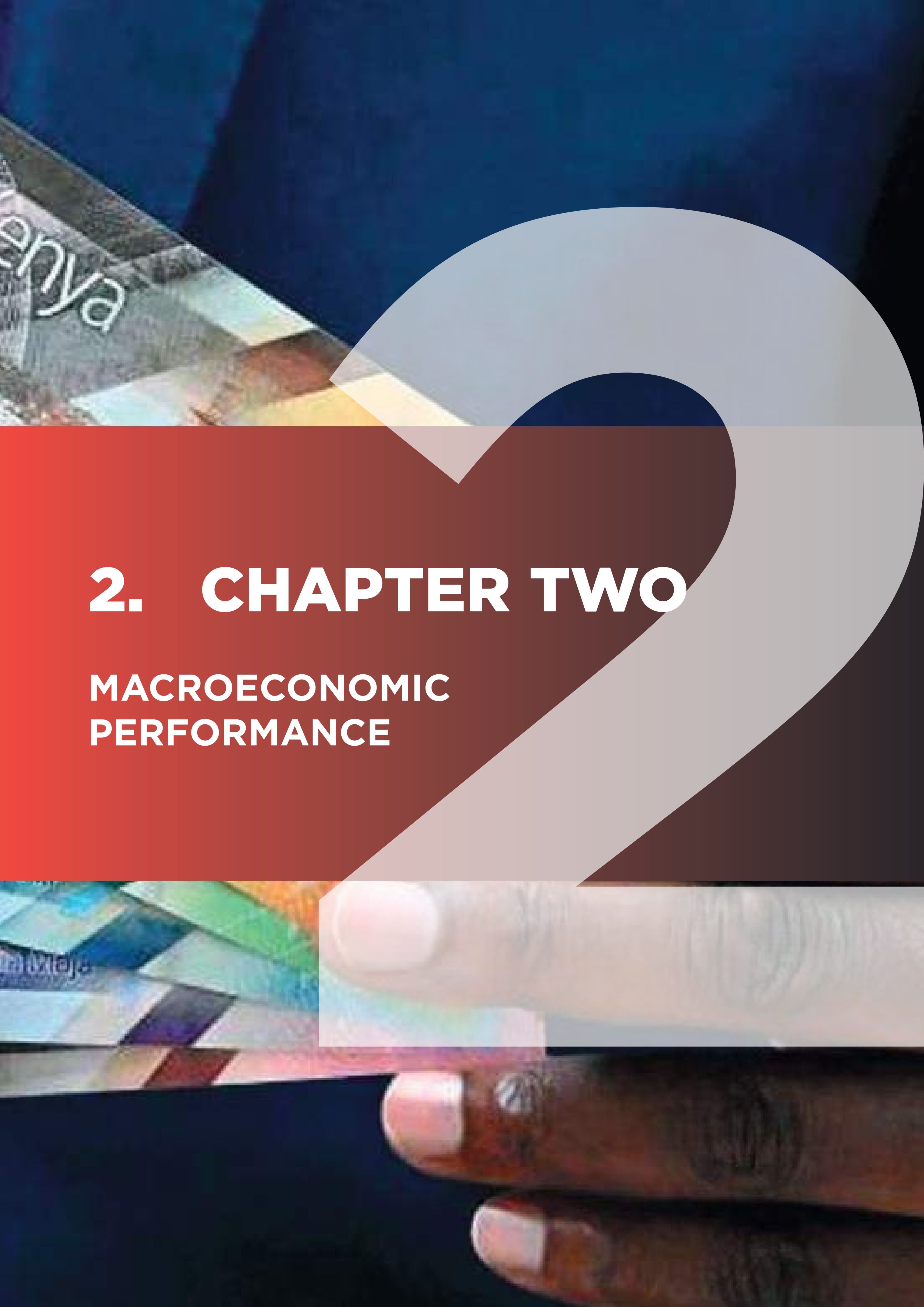


2. CHAPTER TWO

MACROECONOMIC PERFORMANCE

2.1. OVERVIEW OF ECONOMIC PERFORMANCE

The economy bounced back from the crippling effects of the COVID-19 pandemic to expand by 7.6 percent in 2021 compared to a contraction of 0.3 percent in 2020. This was mainly driven by resumption of most economic activities after the COVID-19 containment measures instituted in 2020 to curb the spread of the virus were lifted.

2.2. THE SIZE OF THE ECONOMY

The nominal GDP rose from KSh 10,716.0 billion in 2020 to KSh 12,098.2 billion in 2021, representing an increase of 12.9 percent. This was supported by positive growths in all economic activities except agriculture, forestry and fishing which contracted by 0.4 percent. Accommodation and food services experienced a 52.6 percent increase, while education services that had been severely affected by the pandemic grew significantly faster at 22.8 percent than those sectors that were less affected in 2020. Other sectors that recorded improved performances include manufacturing (6.9 percent), wholesale and retail trade (7.9 percent), real estate (6.7 percent), transportation and storage (7.2 percent), and financial and insurance activities (12.5 percent). This is illustrated in Table 2.1 below.

Table 2.1: Changes in Nominal GDP Estimates after Rebasing

Industry	2017	2018	2019	2020+	2021*
Agriculture, forestry and fishing	-1.3	5.7	2.7	4.6	-0.4
Mining and quarrying	3.2	-4.7	4.3	5.5	18.0
Manufacturing	0.7	3.6	2.6	-0.3	7.3
Electricity supply	5.6	4.0	1.9	-0.5	5.3
Water supply, sewerage and waste management	-3.2	2.5	1.3	3.6	6.3
Construction	6.3	6.1	7.2	10.1	6.7
Wholesale and retail trade, and repairs	4.3	5.9	5.3	-0.4	8.0
Transportation and storage	3.5	6.0	6.3	-8.0	7.4
Accommodation and food services	9.4	15.6	14.3	-47.7	52.6
Information and communication	8.1	7.9	7.0	6.0	6.1
Financial and insurance activities	4.1	2.7	8.1	5.9	11.5
Real estate	6.7	6.5	6.7	4.1	6.7
Professional, scientific and technical activities	3.7	5.4	6.8	-11.5	7.9
Administrative and support service activities	1.6	9.8	6.8	-17.6	5.6
Public administration and defence	3.9	7.9	8.4	7.0	6.0
Education	8.7	6.8	5.7	-9.2	22.8

Industry	2017	2018	2019	2020+	2021*
Human health and social work activities	6.4	5.4	5.5	5.6	8.9
Arts, entertainment and recreation	16.5	3.7	8.0	-28.3	12.4
Other service activities	3.9	4.0	4.9	-19.5	18.9
Activities of households as employers	1.5	1.5	1.5	1.5	1.5
Financial intermediation services indirectly measured	-6.0	3.7	9.5	-1.8	5.3
All industries at basic prices	**3.7**	**5.6**	**5.2**	**0.5**	**7.2**
Taxes on products	5.7	5.9	3.9	-8.0	11.9
Overall Nominal GDP	**3.8**	**5.6**	**5.1**	**-0.3**	**7.6**

Source: Kenya Economic Survey [Kenya National Bureau of Statistics (KNBS)] 2022

** Provisional*

+Revised

2.3. ECONOMIC GROWTH

The economy has experienced significant growth and transformation in the face of various local and global challenges in the year 2021. Real GDP in absolute terms increased from a revised total of KSh 8,735.0 billion in 2020 to KSh 9,391.7 billion in 2021. This translated to an overall growth of 7.5 percent in 2021 compared to a contraction of 0.3 percent in 2020. Accommodation and food services registered the highest growth from a contraction of 47.7 percent in 2020 to a growth of 52.5 percent, mainly attributed to recovery of the tourism sector. There was a slump in performance in the agriculture sector mainly caused by unfavourable weather conditions, however, it still remained the dominant sector accounting for 21.5 percent of the economy as illustrated in Table 2.2 below.

Table 2.2: Real GDP Growth by Sector

Industry	2017	2018	2019	2020+	2021*
Agriculture, forestry and fishing	20.9	20.3	20.9	22.7	21.5
Mining and quarrying	0.8	0.7	0.7	0.7	0.8
Manufacturing	8.7	8.4	7.9	7.6	7.4
Electricity supply	1.8	1.7	1.6	1.5	1.4
Water supply, sewerage and waste management	0.7	0.6	0.6	0.6	0.5
Construction	5.4	5.8	6.2	7.0	7.1
Wholesale and retail trade, and repairs	8.4	8.2	8.2	8.1	7.9
Transportation and storage	10.2	11.3	11.7	10.8	11.6
Accommodation and food service activities	1.0	1.1	1.2	0.7	1.1
Information and communication	2.6	2.6	2.5	2.6	2.4

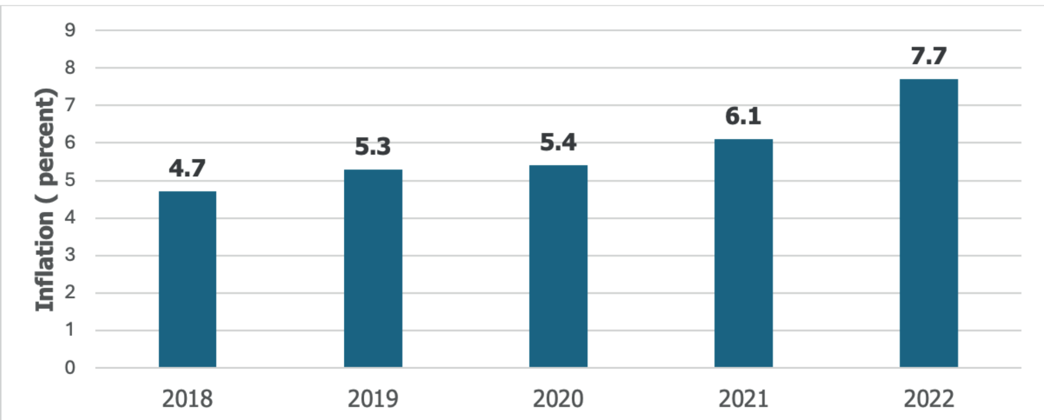
Industry	2017	2018	2019	2020+	2021*
Financial and insurance activities	7.5	6.7	6.5	6.7	7.2
Real estate	9.3	9.4	9.2	9.3	9.0
Professional, scientific and technical activities	1.8	1.8	1.7	1.5	1.5
Administrative and support service activities	1.0	1.0	1.1	0.9	0.9
Public administration and defence	5.2	5.3	5.3	5.5	5.3
Education	4.3	4.3	4.2	3.9	4.3
Human health and social work activities	2.1	2.0	1.9	2.0	2.0
Arts, entertainment and recreation	0.3	0.3	0.3	0.2	0.2
Other service activities	1.4	1.5	1.4	1.2	1.2
Activities of households as employers	0.7	0.7	0.7	0.7	0.6
Financial intermediation services indirectly measured	-2.8	-2.3	-2.2	-2.0	-2.0
All economic activities	**91.4**	**91.3**	**91.5**	**92**	**91.7**
Taxes less subsidies on production	8.6	8.7	8.5	8.0	8.3
Real GDP Growth	**3.8**	**5.6**	**5.1**	**-0.3**	**7.6**

Source: Kenya Economic Survey (KNBS) 2022

2.4. INFLATION

Global inflation climbed from 3.2 percent in 2020 to 4.3 percent in 2021. This increase was largely driven by elevated agricultural and energy costs, along with disruptions in supply chains. Surging oil demand led to a rise in *Murban Adnoc* crude oil prices from US$ 41.29 per barrel in 2020 to US$ 65.68 per barrel in 2021. In advanced economies, inflation surged from 0.7 percent in 2020 to 2.8 percent in 2021, while emerging markets and developing economies saw an increase from 5.4 percent in 2020 to 8.4 percent in 2021. In Sub-Saharan Africa, inflation ticked up from 10.3 percent in 2020 to 10.7 percent in 2021. In Kenya, the annual inflation rate measured by the CPI rose from 6.1 percent to 7.7 percent in 2022, primarily due to rising fuel and food prices.

Figure 2-1: Average Annual Inflation Rate (2018-2022)



Source: Kenya Economic Survey (KNBS) 2022

Table 2.3: Inflation Rates for Financial Year 2021/22

Developments in Inflation (Percent)													
	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Overall, 12-month inflation	6.3	6.5	6.6	6.9	6.4	5.8	5.7	5.4	5.1	5.6	6.5	7.1	7.9
Food Inflation	8.5	9.1	10.7	10.6	10.6	9.9	9.1	8.9	8.7	9.9	12.1	12.4	13.8
Fuel Inflation	13.5	12.0	9.2	11.1	9.6	10.3	10.5	8.2	6.5	5.8	8.5	9.0	10.0
Non- (Food & Fuel) Inflation	2.6	2.9	2.6	2.7	2.2	1.9	1.9	1.9	2.0	2.2	2.5	2.6	2.9
Three months annualised	4.6	2.5	2.6	3.4	4.3	5.3	7.8	6.9	6.7	6.5	12.4	14.1	14.3

Source: KNBS

2.5. INTEREST RATES

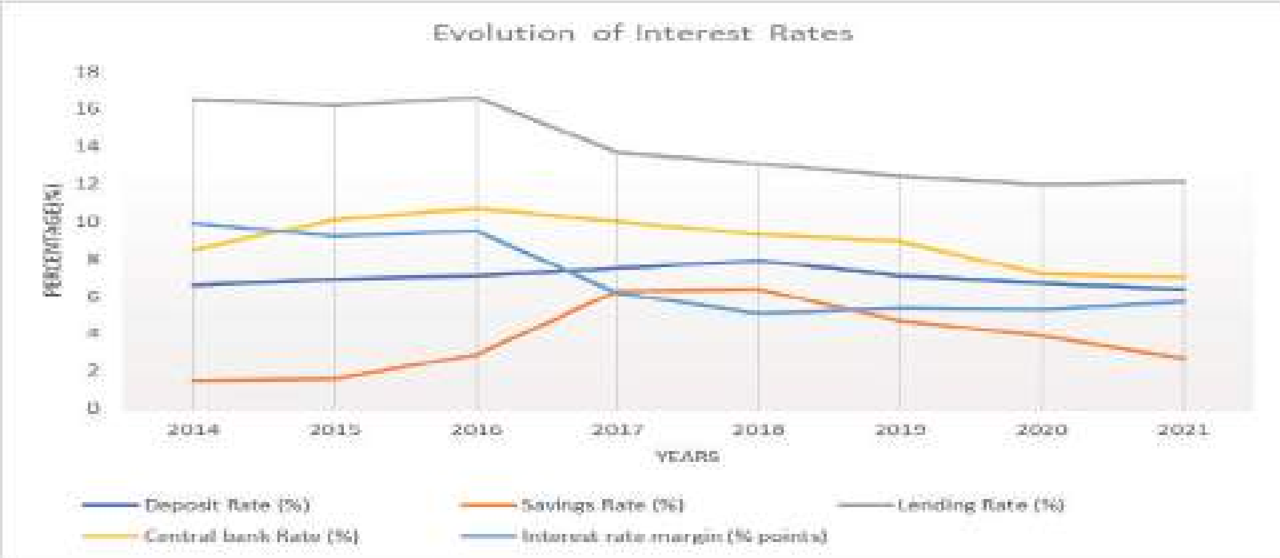
The monetary policy stance adopted in 2021 was aimed at accelerating economic recovery after a slowdown in most economic activities occasioned by the adverse effects of the COVID-19 pandemic. The Central Bank Rate (CBR) remained at 7.0 percent throughout the year. Broad money supply (M_3) and overall liquidity grew by 6.1 and 9.5 percent respectively. The weighted average real interest rate for commercial bank deposits increased to 0.77 percent in 2021 from 0.68 percent in 2020. Similarly, loans and advances rates increased from 12.02 percent in December 2020 to 12.16 percent in December 2021 which led to a reduction in average interest rates to 5.66 percent in 2021.

Table 2.4: Evolution of Interest Rates

	2014	2015	2016	2017	2018	2019	2020	2021
Deposit rate (percent)	6.6	6.9	7.1	7.5	7.9	7.1	6.7	6.4
Savings rate (percent)	1.5	1.6	2.9	6.3	6.4	4.7	3.9	2.7
Lending rate (percent)	16.5	16.2	16.6	13.7	13.1	12.4	12.0	12.1
Central Bank Rate	8.5	10.1	10.7	10.0	9.3	8.9	7.2	7.0
Interest rate margin (percentage points)	9.9	9.2	9.5	6.2	5.1	5.4	5.3	5.7

Source: CBK

Figure 2-2: Trends of Interest Rates



Source: CBK

2.6. DEVELOPMENT IN EXCHANGE RATE AND FOREIGN RESERVES

In 2021, the Kenya Shilling experienced a decline in value against the currencies of major trading partners, manifested in the Trade Weighted Index, which rose by 5.4 percent from 115.37 in 2020 to 121.66, as shown in Table 2.5 below. Specifically, the Kenya Shilling lost ground against the Sterling Pound (10.3 percent), the Euro (6.7 percent), the US Dollar (3.0 percent), the Chinese Yuan (10.0 percent), and the South African Rand (13.9 percent) during the period under review. Likewise, the Tanzanian and Ugandan shillings appreciated against the Kenyan Shilling by 3.0 percent and 6.4 percent respectively in 2021.

Table 2.5: Exchange Rate and Foreign Exchange Reserves

Currency	2017	2018	2019	2020	2021*
1 Euro[2]	116.73	119.63	114.18	121.65	129.76
1 US Dollar	103.41	101.29	101.99	106.47	109.65
1 Pound Sterling	133.20	135.25	130.18	136.73	150.85
1 UAE Dirham	28.15	27.58	27.77	28.99	29.85
1 Deutsche Mark	59.68	61.17	58.38	62.20	66.34
1 Dutch Guilder	52.97	54.29	51.81	55.20	58.88
1 French Franc	17.80	18.24	17.41	18.54	19.78
100 Italian Lira	6.03	6.18	5.90	6.28	6.70
1 Belgian Franc	2.89	2.97	2.83	3.02	3.22
1 Indian Rupee	1.59	1.48	1.45	1.44	1.48

Currency	2017	2018	2019	2020	2021*
1 Chinese Yuan	15.30	15.33	14.76	15.45	17.00
1 SA Rand	7.77	7.69	7.06	6.51	7.42
100 Japanese Yen	92.22	91.74	93.59	99.80	99.94
1 Saudi Riyal	27.57	27.01	27.19	28.37	29.23
1 Egyptian Pound[3]	5.80	5.69	6.07	6.74	6.99
TSh/KSh[4]	21.63	22.48	22.63	21.76	21.12
1 Pakistan Rupee[3]	0.98	0.84	0.68	0.66	0.67
1 Swedish Kroner	12.12	11.67	10.79	11.62	12.79
1 Swiss Franc	105.04	103.58	102.62	113.61	119.98
USh/KSh[4]	34.92	36.81	36.32	34.93	32.72
1 Congolese Franc[3]	0.07	0.06	0.06	0.06	0.06
100 Rwanda Francs[3]	8.11	8.50	8.82	8.86	9.13
Overall Trade Weighted Index, (2009=100)	**116.52**	**115.66**	**113.04**	**115.37**	**121.66**

Source: CBK

***Provisional**

1 Annual average

2 Countries in the Euro area included in the computation of Trade Weighted Fisher's Ideal Index are: Germany, France, Switzerland, Netherlands, Belgium and Italy.

3 Via US dollar Exchange Rates

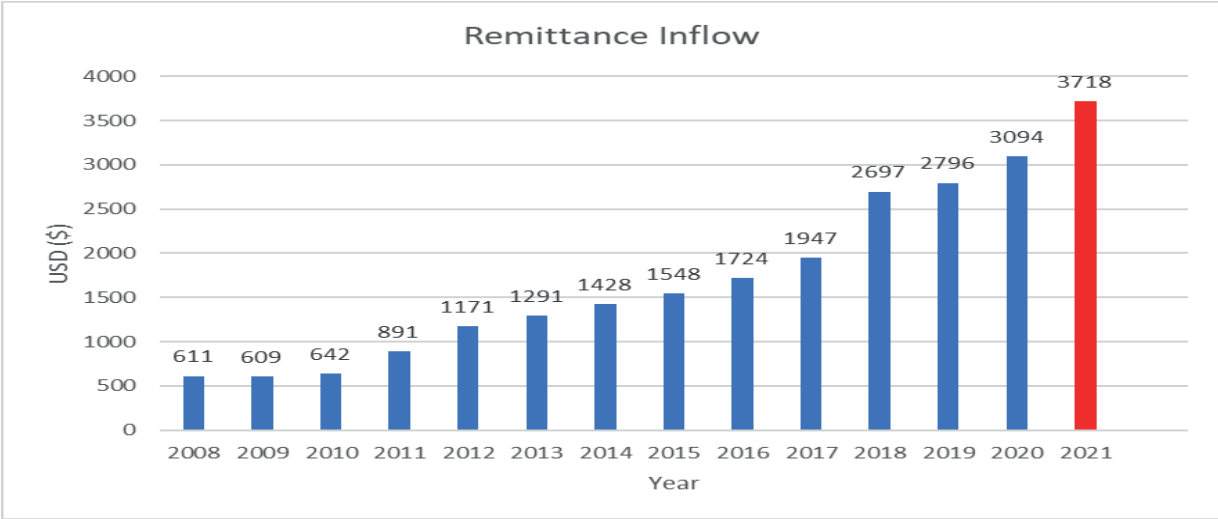
4 Calculated as 1 Kenya Shilling to Uganda or Tanzania Shilling

The official and usable foreign Exchange reserves in the FY 2021/22 remained adequate at US$ 8,495 million which is equivalent to 4.9 months of import cover as at the end of June 2022 compared to US$ 9,957 million equivalent to 6.1 months of import cover as at end of June 2021.

2.7. REMITTANCE INFLOWS

The total amount of remittances from the diaspora reached US$ 4,012 million in 2022, marking a significant increase from US$ 3,383 million in 2021, reflecting an 18.6 percent rise. This increase is attributed to the improvement of global economic conditions. The United States remained the primary contributor to remittances sent to Kenya, making up 59 percent of the total remittances received in the period up to June 2022.

Figure 2-3: Developments of Remittance Inflows



Source: CBK Annual Report 2022

2.8. BALANCE OF PAYMENT DEVELOPMENT

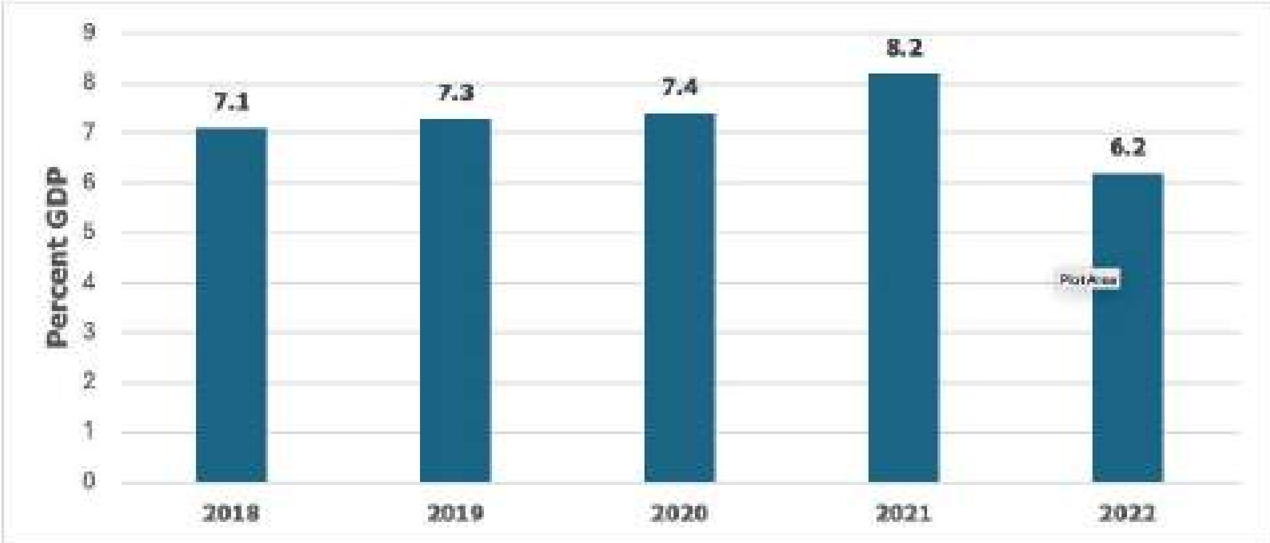
The gradual relaxation of COVID-19 containment measures facilitated the reopening of economies, resulting in improved global trade in 2021 compared to 2020. In Kenya, trade volume amounted to KSh. 2,894.9 billion in 2021, up from KSh. 2,287.3 billion in 2020. This increase was driven by a 30.9 percent surge in imports and 15.5 percent rise in total exports, primarily fuelled by increases in domestic exports of horticulture, titanium ores and concentrates, and articles of apparel and clothing accessories.

Import expenditure surged by 30.9 percent to KSh. 2,151.2 billion in 2021 from KSh. 1,643.6 billion in 2020. Meanwhile, earnings from total exports grew for the second consecutive year to KSh. 743.7 billion in 2021 from KSh.643.7 billion in 2020, reflecting a 15.5 percent increase. However, the faster growth in imports compared to exports led to a widening of the trade balance deficit from KSh. 999.9 billion in 2020 to KSh. 1,407.6 billion in 2021. This deficit meant that earnings from total exports could only cover 34.6 percent of the country's imports during the period. Despite a surplus of KSh. 92.8 billion in the services account and a surplus of KSh. 671.6 billion in the secondary income account in 2021, the widening trade deficit contributed to a deterioration of the current account balance from a deficit of KSh. 510.1 billion in 2020 to a deficit of KSh. 663.0 billion in 2021.

2.9. DEVELOPMENT IN PUBLIC FINANCE

The National Government recurrent revenue and grants grew by 15.7 percent from KSh 1,834.8 billion in 2020/21 to KSh 2,230.8 billion in 2021/22 while the total expenditure grew by 9.4 percent from KSh 2,731.9 billion to KSh 2,989.6 billion. However, the revenue and grants were not sufficient for investment in high quality infrastructure projects, hence the high fiscal deficit of 8.2 percent in 2021. This led to a fiscal consolidation plan that reduced the fiscal deficit to 6.2 percent in 2022 as illustrated in Figure 2-4 below.

Figure 2-4: Evolution of Fiscal Deficit

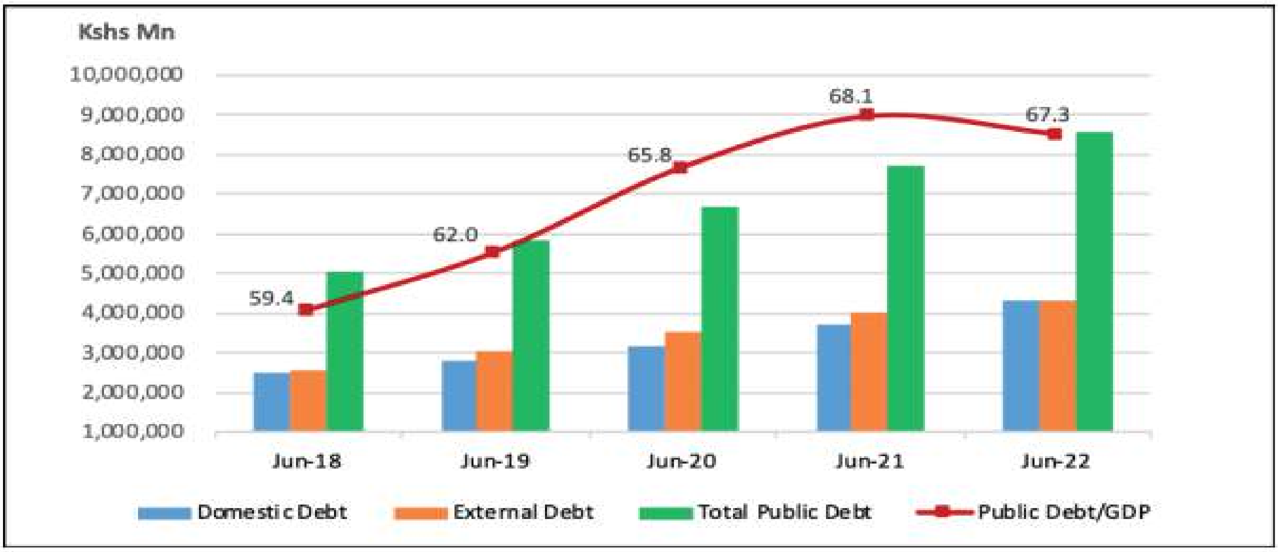


Source: The National Treasury

During the period under review, public debt as a percentage of GDP reduced from 68.1 percent to 67.3 percent. The total stock of National Government debt was KSh 8,588.3 billion in June 2022 up from KSh 7,696.6 billion as at the end of June 2021, with external debt accounting for 50.1 percent of the total debt.

As at end June 2022, the stock of domestic debt was KSh. 4,288,333 million, an increase of KSh. 591,240 million from KSh. 3,697,093 million in June 2021 as illustrated in figure 2-5 below. The increase in stock was due to a net increase in domestic borrowing during the financial year to finance the government deficit.

Figure 2-5: Trends of Public Debt to GDP



Source: The National Treasury

3. CHAPTER THREE

FOUNDATIONS FOR NATIONAL TRANSFORMATION

3.1. INFRASTRUCTURE

"Deploying World Class Infrastructure Facilities and Services"

Infrastructure plays a critical role in facilitating and accelerating socio-economic development in the country. The Government has continued in its efforts to develop efficient and effective infrastructure, which is a key enabler for other sectors as envisaged in the Kenya Vision 2030. In the MTP III period, investment in infrastructure programmes and projects focuses on accessibility, quality, functionality, job creation, disaster preparedness and protection of the environment. Investing in infrastructural development supports the achievement of the "Big Four" Agenda by building on the on-going infrastructural development.

The infrastructure sector is composed of five sub sectors namely, Roads, Rail, Air, Ports and Energy. These are the drivers that create an enabling environment for national development.

One of the major infrastructural programmes under the sector is the Lamu Port South Sudan Ethiopia Transport (LAPSSET) Corridor which is a Regional Multimodal Infrastructure Programme between Kenya, Ethiopia and South Sudan. Its objective is to create a second strategic corridor opening the Northern parts of Kenya and connecting to the partner states of Ethiopia and South Sudan. Given its significance in the region, some components of the programme have since been selected and admitted under the Programme for Infrastructure Development in Africa (PIDA) Priority Action Plan. The LAPSSET Corridor Programme is multi-sectoral and implemented by different Ministries, Departments and Agencies. It encompasses seven key components, namely: The Port of Lamu; Highways; Railways; Crude and Product Oil Pipelines; International airports in Lamu, Turkana and Isiolo; Resort Cities in Lamu, Turkana and Isiolo; and High Grand Falls Multipurpose Dams. In addition, the following supporting infrastructure is planned alongside the key components: water supply lines; power supply lines; and fibre optic cable and communication systems.

3.1.1. Roads Sub-Sector

The sub-sector is a key contributor to Kenya's global competitiveness through the provision of road infrastructure. It aims at enhancing domestic and regional connectivity, boosting rural productivity, reducing urban congestion, and implementing key initiatives towards ensuring safety in roads. The sub-sector is responsible for the construction, maintenance and management of the national trunk roads as stipulated in the Fourth Schedule of the Constitution.

Roads Sub-Sector Performance

The sub-sector implemented various road projects towards enhancing the movement of people, goods and services for improved socio-economic development. Table 3.1 below presents a summary of achievements of the sub-sector for FY 2021/22.

Table 3.1: Roads Sub-Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievements FY 2020/21	Targets FY 2021/22	Achievements FY 2021/22	Remarks
Improved accessibility through all weather roads	Kilometres of classified roads maintained	37,361.89	50,000	41,134.60	The target was not met due to inadequate funding
	Kilometres of additional classified roads constructed and rehabilitated	1,553.97	2,000	1,640.87	The target missed because of inadequate funding. Works slowed down as a result of COVID-19 pandemic restrictions.

Source: State Department for Infrastructure Annual Progress Report, FY 2021/22

During the period under review, a total of 1,640.87km of road comprising 891.77km of new roads, 663.1km under 10,000 Low Volume Seal Roads was constructed and rehabilitated. Further, a total of 41,134.6km of roads comprising 632.72km under periodic maintenance and 40,501.89km under routine maintenance was maintained.

Roads Expansion Programme

The programme is aimed at enhancing domestic and regional connectivity, boosting rural productivity, and reducing urban congestion. It involves construction and rehabilitation of 10,000 km of roads comprising 2,500km of conventional roads and 7,500km LVSR.

Since the inception of the programme in January 2016, a total of 4,964.73km had been upgraded to bitumen standard. The flagship programmes and projects implemented under the programme during FY 2021/22 include:

a) Regional Integration & Accessibility Improvement

Location: Nationwide

Objective: To enhance socio-economic growth and prosperity

Implementing Agencies: Kenya National Highways Authority (KeNHA), Kenya Urban Roads Authority (KURA), and Kenya Wildlife Service (KWS).

Project Progress: A total of 357.14km of roads was constructed by June 2022 comprising of Eldoret Bypass (35.46km); Kibwezi - Mutomo – Kitui (21.52km) accounting for 99 percent for the original scope and 28 percent for Addendum No.3; Nairobi Western Bypass (34.44km); Isebania – Kisii (52.84km), Kenol – Sagana (149.88km); and Sagana – Marua (63km).

b) The Kenya Transport Sector Support Project

Location: Nationwide

Objective: To increase the efficiency of road transport

Implementing Agencies: KeNHA, KURA, KWS, and National Transport and Safety Authority (NTSA).

Project Progress: Under this project, a total of 7.2km of road was constructed comprising 2.6km of Kisumu Boys – Mamboleo; 4.6km of Athi River–Machakos Turn-off; Interchange at Kericho Junction (81 percent completion rate) and construction of Interchange at Ahero Junction (81 percent completion rate).

c) East Africa Regional Transport, Trade and Development Facilitation Project

Location: Eldoret-Kitale-Lodwar-Nadapal

Objective: To promote and facilitate regional economic integration between Kenya and South Sudan

Implementing Agency: KeNHA

Project Progress: A total of 206km of the Eldoret to Nadapal road was constructed/ upgraded during the period under review. These included 24.26km of Kalobeyei River- Nadapal; 14.72km of Lokitaung Junction –Kalobeyei River; 3.8km of Lodwar –Loichangamatak; and 30.1km of Lokichar- Loichangamak Road.

d) Mombasa Port Area Road Development Project

Location: Mombasa

Objective: To facilitate ease of movement around Mombasa Port from the new container terminal to the Northern Corridor and the Mombasa Southern Bypass along which the Dongo Kundu Special Economic Zone is being developed and beyond. The improved traffic route will help achieve overall economic and social development in Kenya and neighbouring East African countries.

Implementing Agency: KeNHA

Mombasa Southern Bypass Road: During the period under review, Mwache – Mteza Section was at 50.9 percent completion rate while Mteza – Kibundani Section was at 93 percent completion rate having achieved 26.6km.

e) Horn of Africa Gateway Development Project

Location: Isiolo, Wajir and Mandera

Objective: The project aims at enhancing connectivity among the Horn of Africa countries and access to seaports; facilitation of domestic and regional trade and economic integration and road safety. This would be achieved through a series of projects aimed at improving physical and institutional infrastructure and promoting trade and investing in development facilitation interventions.

Implementing Agency: KeNHA

Progress: Works and supervision contracts for upgrading of road corridor to bitumen standard and civil works associated with Installation of Fiber Optic Cable in three packages namely: Package 1 (Lot 1: Isiolo – Kulamawe & Lot 2: Kulamawe – Modogashe); Package 2 (Lot 1: Wajir – Tarbaj & Lot 2: Tarbaj – Kotulo); Package 3 (Lot 1: Kotulo – Kobo & Lot 2: Kobo – Elwak); construction of One Stop Border Posts, bridges and customs facilitation centres at Rhamu and Mandera; and construction of social amenities along the road corridor were ongoing at various stages of implementation.

f) Lamu Port-Southern Sudan-Ethiopia Transport Corridor

Location: Lamu, Garissa, Isiolo, Marsabit, West Pokot and Turkana

Objective: To open up Northern Kenya and provide a reliable transport corridor for Ethiopia and South Sudan.

Implementing Agencies: KeNHA, and LAPSSET Corridor Development Authority

Progress: During the period under review, a cumulative 240.88km road was constructed comprising 54.5km of Garsen – Lamu – Witu Road.

g) Roads 10,000 Low Volume Sealed Roads Programme

Location: Nationwide

Objective: To upgrade 10,000km of roads to bitumen standard toward opening up rural areas, decongesting major towns, and promoting domestic and regional connectivity to improve accessibility and mobility in rural areas to support the primary growth sectors of the economy such as agriculture.

Implementing Agencies: Kenya Rural Roads Authority, and KURA

Project Progress: A total of 663.1km of roads was constructed to bitumen standard across the country in FY 2021/22. To date, a total of 4,959.24km out of 8,654km of the contracted road works have been constructed/upgraded from gravel/earth standard to bitumen standard since the inception of the programme.

The following multi-year projects were constructed and some completed during the review period: Embu Hospital-Kathangariri - Kianjaka - Kankakee-Runyenjes - Siakago Road; Brister Girls School-Star of Hope Children's Home Loop and Access Road to Kwihota Secondary School; Chebilat - Ikonge - Chabera Road;

Naivasha-Karagita-Kongoni (Moi South Lake Road); Kiutine - Kina-Garbatulla Road; Marikebuni - Marafa - Sosoni Road; Naiberi - Moiben & JCTN Marulla - Koitoror Loop Road (RWC 386); Oinamoi - Kapluk - Barwesa Road in Baringo County; Imaroro - Mashuru - Isara Road; Ngong - Kiserian - Isinya and Kajiado - Imaroro Project; Manga - Kemera - Amabuko Road; Access to Toroton Health Centre Road; Nyamira - Igonga - Nyabioto/ Nyanatutu - Igonga; Riana/ Riana - Iyabe - Chisaro/ Motonto - Suneka Roads; Sultan Hamud-Kasikeu - Kyambeke Road; Indian Bazaar - Ndumberi - Tinganga - Riabai/Kiat-Njathaini & amp; Access to Starehe Girls Centre; JNCT B92-KSG Matuga road;

Karai - Nairutia/ Muringa/ Kiawara/ Narumoru- Babito Roads; C72 St. Mary's - Muranga High School-Muranga University (Road UK-1); Kiria - Kagaa - Kiruri / Kiruri - Githambo Road Project; Mirangi - Tumaini - Mawingu - Kanyariri Road (Tumaini - Mawingu Section); JCN B5 - Subukia - National Catholic Shrine Road; and Kwa Vonza Road; Jomvu Kuu - Jitoni – Rabai (9km); Hola Township Roads (10km); Bomet Town - Kapsimotwa (2.7km); Posta, Lotodo & Kacheliba Roads; Cereals - Chewoyet - Bendera Road (0km), Kapkwen - Kapsimotwa - Silibwet (8.78km); Old Malindi Road (13km); A104 - Old Nairobi Road; Elgon View- Eldoret Poly, Rivatex Kipkaren - A104 (Southern Ring Road); Kenya Service Kapsoya - Munyaka – Hawai/JNC C51 (Northern Ring Road) (0km); Watuka – Wote (6km); Upgrading to Bitumen Standards & Maintenance of Machakos-Mombasa Road; Lukenya (K4) Roads (8.6km); Lady Irene - Mandizini - Muslim - Nambaya - Junction D258 and Wakili RD (8km); Mokowe Township Roads (12km); Maua Town Roads (12km); Nakuru CBD Roads (20.5km); District Hospital-Ndowasco RD-Showground (2.2km); County Road & Link Road -Garissa Ndogo Sankuri (4.7km); Kisumu Township Roads - Milimani Link Roads (0km); Garissa Township Roads (2.76km); and Sankuri-Bulla - Madina Road – Garissa, (1km).

h) Decongestion of Cities and Urban Areas

Location: Major Cities and Urban Areas

Objective: To ensure efficient traffic flow in major urban cities in the country

Implementing Agency: KURA

Project Progress:

i. **Construction of Bypasses:** During the period under review, a total of 41.4km was constructed to bitumen standard, cumulatively totaling 68.5km of bypasses constructed during the MTP III reporting period. These included: Suneka – Kiogoro Bypass; Kiogoro – Kegati Bypass; Nyakoe – Kegati Bypass; Suneka – Nyakoe Bypass and major Link Roads within Kisii Town in Kisii and Nyamira County (19km); dualling of Nairobi Eastern and Northern Bypass (20.10km); Kisii Bypass (5.20km); Kericho Bypass (4.90km); Nyahururu Bypass (7.30km); Thika Bypass/Link Roads (13.00km); Wajir Bypass (8km); and Kangundo Road - Greater Eastern Bypass Link Road - Phase II (10km).

ii. **Construction of Missing Links:** During the reporting period, a total of 16.9km was constructed to bitumen standard, cumulatively totaling to 55.06km during the MTP III reporting period to include: Upper Hill – Mbagathi Link Road (11.00km); EU Missing Links (EU funded 67 percent and 33 percent GoK) (15.20km); Waiyaki Way - Redhill Link Road (5.80km); Ngong Road - Kibera - Kungu Karumba - Langata Road (Missing Link No. 12) (3.40km); Mlolongo-Kware-Katani-Kamulu Link (8.20km); Lenana-Muchugia-Dagoretti (7km); Mlolongo-Athi River Joska (3.30km); Meru Link Roads; and Lot 2 Part of Likoni, and Enterprise and Shreeji Roads in Nairobi (1.16km).

iii. **Improvement of Roads in Cities and Municipalities**: During the period under review, a total of 86.98km of roads were constructed to bitumen standard, cumulatively totaling to 572.98km of roads constructed in cities and municipalities. The roads comprise: Nairobi Outering Road Improvement Project (13km); Informal Settlements roads in Nairobi County (408km roads in Mukuru, Dandora, Utawala, Mihango, Ruai, Dagoretti, Kawangware, Kangemi, Kibera, Ngomongo, Korogocho, Mathare, Roysambu, Githurai, Kasarani and Mwiki): Upper Hill Phase II (6.50km); Eastleigh Phase II (3.00km); Dualling of Ngong Road Phase III (Dagoreti Corner Junction - Karen) (11.00km); Eastlands Roads Phase II (10.20km); Eldoret Access Roads (8.50km); Industrial Area Roads (4.20km); Mandera Town Roads-Phase I (11.70km); Marsabit County Roads Phase I, (10km); Kahawa Sukari Estate Access Roads (6.10km); Kangundo Road - Greater Eastern Bypass Link Road - Phase I (10km); Lucky Summer-Bakhita Gitwamba Bridge (4.30km); Hunters - Githurai Link Road (4.60km); Kajiado Town Access Roads (4.50km); Kamiti Corner - Kasarani - Mwiki - Ruai - Kangundo Roads (3.00km); Narok Town Roads (3.50km); Ngong Road Phase II (JICA) (3.40km); Githurai Kimbo Phase III (5.70km); Access to Rhino Park – Nairobi (3.30km); Thika Town Roads (4.60km); Innercore Estate Roads (1.30km); Kipangawau - Kibowen Pry-Access/ Mwariki Sec School- Pembe Mbili- Eldoret Road (1.50km); Kirinyaga Town Roads (4.10km); Mukuyu Kambwe Sewerage Road (1.50km); Kwale & Ukunda Towship Roads (3.20km); Sankuri - Bulla - Madina Road – Garissa (1.00km); Othaya Town Roads (6.70km); Othaya Level 6 Hospital Access Roads (2.30km); Mother Kelvin Roads (0.50km); Tom-Mboya Road Kisumu (3.80km); Access roads to Kisii Mini State Lodge (1.2km), and Access Roads to and within Gusii Stadium (1.2km).

iv. **Access Roads to Affordable Housing and Industrial Park Facilities:** During the period under review, a total of 5.4km was constructed to bitumen standard. These include Access Roads to Starehe Affordable Housing Project (0.3km); Access to Park Road Housing Project (0.4km); Access to Stoni Athi Housing Project (0.7km); and upgrading to bitumen standard of roads within East Africa Portland Housing Scheme in Machakos County (4km).

v. **Annuity Programme:** During the period under review, a total of 80.1km of roads commenced construction including Annuity Programme Lot 15: Central and Eastern Region Projects and Lot 18: Western Region Projects. The current rate of completion is 10 percent.

vi. **Implementation of City - Wide Congestion Management Strategies:** During the period 2021/22, procurement for design review of 85 junctions under Nairobi Intelligent Transport System (ITS) Establishment and Junctions Improvement Project Phase I (25 junctions) and Nairobi ITS Establishment and Junctions Improvement Project Phase II (60 junctions) commenced.

vii. **Construction of Bridges and Box Culverts:** During the period under review, the following bridges and box culverts were constructed in the following roads: construction of Hunters - Githurai Missing Link, 1 Box Culvert; Narok Town Roads Box Culvert at 20 percent complete; rehabilitation and upgrading of Eastlands Roads (Phase II) River Bridge at 100 percent progress; 2 box culverts on Improvement of Nairobi Roads Lot 1 and Associated Road Works on Kikuyu Road; 1 box culvert on Shimo La Tewa Link; Bridge on elected South C Roads; 3 box culverts on Improvement of Mokowe Township Roads; 5 bridges and 6 box culverts on dualling of Nairobi Eastern Bypass (Baraka Roundabout to Ruiru/ Kamiti Junction); 1 box culvert on Meru Bypass; and 1 box culvert of Devki-Kinanie.

viii. **Construction of Non-Motorised Transport Facilities:** During the reporting period, a total of 398.09km of walkways was constructed. In addition, one footbridge on Outer Ring Road was completed and three footbridges under construction on Ngong Road were 50 percent complete.

ix. **Road Maintenance:** A total of 2,066km was maintained under routine maintenance and 352.79km of roads were implemented under periodic maintenance.

x. **Feasibility Studies, Preliminary and Detailed Engineering Design:** During the period under review, a total of 189km, including Landhies Road (4.5km) and Jogoo Road (5km) interchanges and Kisumu NMT (11km) and Nakuru NMT (5.4km) interchanges, was designed.

i) Road Safety Programme

Location: Nationwide

Objective: To protect life and property on the road, targeting reduction of incidences of road crashes and their impact on the Kenyan economy

Implementing Agencies: NTSA, and Ministry of Roads and Transport.

Project Progress: NTSA carried out sensitisation campaigns on road safety for 36 PSV Savings and Credit Co-operative Societies (SACCOs), PSV drivers and conductors, 1,800 motorcycle riders, over 300 HCV drivers, passengers, school children from 96 schools and pedestrians through road safety forums, TV and radio talk shows, workshops and joint public education and enforcement operations with NPS.

The fatality and injury index as of 30th June 2022 was 10.71 and 38.37 per 10,000 vehicles respectively. The Authority automated its two motor vehicle inspection centres at Likoni Road and Miritini. The automated centres were fitted with modern brakes, emission and headlight testers, and display units, noise meters and play detectors. In addition, offices at Kisumu, Eldoret, Miritini and Nakuru inspection centres were upgraded.

By the end of June 2022, 414,063 boda-boda riders were registered through boda-boda management portal. Six sensitisation forums targeting driving school proprietors, instructors and managers were undertaken to promote behaviour change; 24 road safety audits were conducted to enhance the safety of the road infrastructure; and 464,094 motor vehicles were inspected to promote safety of vehicles. There was 0 percent progress on the implementation of Second-Generation Number Plates. A total of 311,547 smart driving licences and 183,866 stickers were issued. Additionally, road transport regulations were developed and submitted to the Ministry of Roads and Transport for onward engagement with Parliament for enactment. NTSA also developed and operationalised the Boda Boda Management System including sensitisation, training, and licensing; developed road safety mainstreaming policy guidelines, trained 365 Road Safety Committees/Units, negotiated Road Safety Mainstreaming Targets and vetted for 429 MDAs. Sensitisation forums of HCV operators in Mombasa, Nakuru and Kisumu on traffic laws were held to help reduce cargo-related accidents on the corridor. Further, the Authority developed road safety policy guidelines for public service vehicles and heavy commercial vehicles and shared them with the stakeholders.

NTSA also trained 210 PSV operators in the development and implementation of their internal road safety policies.

Implementation Challenges

- Inadequate budgetary allocation leads to huge pending bills and further escalated costs due to claims.
- Inadequate sustainable financial, technological and managerial local contractor capacity to undertake road works leading to slow progress in some projects.
- Demand for payment of cess by county governments for construction materials.
- Depletion of natural road construction materials.
- Delays in relocation of utility services (water pipes, power lines, oil pipes and internet cables).
- High cost of land acquisition.
- COVID-19 containment measures affected contracted works.
- Vandalism of road furniture and infrastructure.
- Rising cases of litigation on land acquisition and infrastructure development works.
- Inadequate research and development on road development and maintenance technologies.
- Encroachment of road reserve by services necessitating need for relocation resulting in additional costs and delays in contract implementation.
- Increased overloading resulting in accelerated deterioration of the road pavement.
- Lack of harmonisation of the various statutes governing the road sub sector creating cases of conflict between the National and County Governments.

Lessons Learnt

- It is important to explore other sources of funding, including Public Private Partnerships (PPPs) in development and maintenance of road infrastructure to complement Government funding.
- Developing a land bank, though capital intensive, would reduce the cost of land acquisition for infrastructure projects.
- Reviewing the criteria of registration and upgrading of local contractors at the National Construction Authority to blacklist briefcase contractors should be explored.
- Enforcement of the policy guidelines on utilisation of road reserves and prioritisation of maintenance of paved roads is crucial for utilisation.
- Enhancement of policy guidelines on axle load limits and enforcement of the existing laws should be emphasised.
- Capacity building for the implementation of the Performance Based Contracts enhances performance.
- Need to prioritise the development of major drainage structures (box culverts and bridges) management systems.
- Enhanced recruitment of all requisite cadres of personnel crucial for the development of the sub-sector.
- Need for adoption of latest technology in road development and maintenance programmes.

Recommendations

- Provide adequate resources to facilitate completion of overdue projects and avert accumulation of costs.
- Increase collaboration with the private sector through PPPs to leverage and provide additional financing and expertise in construction, rehabilitation and maintenance of roads.
- Liaise with county governments to

waive cess charged on construction materials.

- Enhance local contractors' capacity through training and dedicated financial support from the National Government including continuous encouragement of joint ventures amongst the contractors to leverage existing local contracting capacity.
- Liaise with service providers for speedy relocation of utility facilities.
- Harmonise all roads related statutes for smooth operation of NTSA.
- Enhance liaison with other Government agencies, development partners and stakeholders for enhanced funding towards construction and maintenance of roads.
- Collaborate with other agencies to fast-track land acquisition, design reviews, and relocation of power lines.
- Implement the Low Volume Seal contracting model that includes maintenance components in the road construction contracts to guarantee maintenance.
- Use mobile weighbridges/ virtual weighbridges as a compliance control to overloading.
- Adopt alternative road development technologies e.g. low volume seal technology and cobblestone including increased collaboration with industry players in research for other alternative technologies.
- Continuous capacity building through training and recruitment of more local engineers as well as technical staff to enhance managerial and supervision capacity.
- Establish an inter-agency committee on relocation of services.

3.1.2. Rail Transport Sub-Sector

The main objective of the rail transport sub-sector is to develop and manage efficient and reliable railway transport systems, increase railway transportation capacity, as well as reduce cost of transportation. The sub-sector aims to increase rail haulage capacity from the Port of Mombasa and promote urban commuter rail services. It entails construction of SGR components and MGR links to various urban areas and improvement of commuter railway stations.

The sub-sector recorded a remarkable performance during the review period as outlined in Table 3.2.

Table 3.2: Rail Transport Sub-Sector Achievements for FY 2021-22

MTP III Outcome	Outcome Indicator	Achievements FY 2020/21	Target FY 2021/22	Achievements FY 2021/22	Remarks
Improved access to rail services	Rail passengers handled per year ('000)	4,500	3,658	6,315	The target was surpassed following: Introduction of an additional SGR passenger trip Expansion of the Nairobi commuter service Operationalisation of commuter rail service buses for last mile services
	Rail freight handle per year ('000 tonnes)	5,780	7,116	6,228	Performance of freight movement was affected by the ripple effects of the global economic crisis arising from the war in Ukraine which disrupted supply chains.

Source: Kenya Railways Corporation (KRC) Annual Progress Report, FY 2021/22

A total of 6.33 million passengers was handled comprising 2.25 million and 4.08 million commuters moved by Madaraka Express and the Nairobi Commuter Rail (NCR) Services respectively. The number of passengers increased by more than 40 percent from the previous period's (2020/21) 4.5 million during which 1.2 million passengers were moved by Madaraka Express and 3.2 million by NCR. The period's target of 3.6 million was surpassed following the easing of COVID-19 containment measures. Earnings from Madaraka Express more than doubled to KSh.2.2 billion; revenue from passenger services on the MGR was KSh.234 million.

A total of 6.23 million tonnes of freight was moved consisting of 5.66 million tonnes and 0.56 million tonnes for SGR and MGR respectively. The rail market share of the Port throughput during the year was 24 percent compared to the previous year's 22 percent. Revenue from haulage on SGR rose by 24 percent to KSh. 13.0 billion. Revenue from cargo transported on the MGR rose marginally to KSh.1,118 million; cargo throughput at the Port of Mombasa increased to 34.5 thousand tonnes while container traffic rose to 1,435,300 TEUs.

During the review period, several projects were implemented in an effort to increase railway haulage capacity from 5 percent to 50 percent of the cargo throughput from the Port of Mombasa and to promote commuter rail services in major urban areas.

a) Expansion of Capacity of Railway Transport

i. Construction of 23.5km Naivasha ICD – Longonot MGR Link

Location: Nakuru County

Objective: To facilitate seamless transshipment of transit and western region bound cargo between SGR and MGR in Naivasha.

Implementing Agency: KRC

Project progress: In the review period, 23.5km of railway link between SGR, MGR and truck parking yard at Naivasha ICD was completed.

ii. Rehabilitation of Longonot - Malaba MGR Line (Phase I)

Location: Nakuru, Kericho, Uasin Gishu, Trans-Nzoia and Busia Counties.

Objective: To facilitate efficient evacuation and enhance ease of movement of freight destined to Western Kenya and the Great Lakes Region.

Implementing Agency: KRC

Project Progress: Rehabilitation of the 465km Longonot - Malaba MGR Line (Phase I) was substantially completed and operationalised during the period.

iii. Revitalisation of the 217km Nakuru – Kisumu MGR Branch Line

Location: Nakuru, Kericho and Kisumu Counties

Objective: Facilitate movement of cargo and passengers to the Western Region and across Lake Victoria.

Implementing Agency: KRC

Project Progress: Rehabilitation of the line was implemented up to 70 percent during the period.

iv. Revitalisation of the 78km Gilgil – Nyahururu MGR Branch Line

Location: Nakuru and Nyandarua Counties

Objective: Facilitate movement of agricultural produce and passengers in the country.

Implementing Agency: KRC

Project Progress: Rehabilitation of the line was implemented up to 64 percent during the period.

v. Revitalisation of the 65km Leseru – Kitale MGR Branch Line

Location: Nakuru and Nyandarua Counties

Objective: Facilitate movement of agricultural produce and passengers in the country.

Implementing Agency: KRC

Project Progress: Rehabilitation of the line was implemented up to 77 percent during the period.

vi. RevitaliSation of the 69km Kisumu – Butere MGR Line

Location: Kisumu and Kakamega Counties

Objective: Facilitate movement of agricultural produce and passengers in the country.

Implementing Agency: KRC

Project Progress: Rehabilitation of the line was implemented up to 64 percent during the period.

b) Promotion of Urban Commuter Rail Services

i. Nairobi Commuter Rail Rehabilitation Project

Location: Nairobi Metropolitan

Objective: To improve rider comfort, safety of commuters and reliability of trains

Implementing Agency: KRC

Project Progress: 168.6km track was substantially completed and commissioned; Nairobi Central Station was completed and operationalised; 11 Diesel Multiple Units were delivered, commissioned, and operationalised. Under this project, the NCR services were expanded to Limuru and Lukenya. In addition, the Commuter Rail Service buses were operationalised for last mile services for commuters from the Nairobi Railway Station to various parts of the city.

Implementation Challenges

- Encroachment of railway corridor.
- Delays in relocation of utility services (water pipes, power lines, oil pipes and internet cables).
- High cost of land acquisition.
- COVID-19 containment measures affected contracted works.
- Vandalism of road furniture and infrastructure.
- Rising cases of litigation on land acquisition and infrastructure development works.

Lesson Learnt

- Diversification of sources of funding including PPPs in development and maintenance of road infrastructure to complement Government funding enhances the completion of projects.

Recommendations

- Enhance budgetary allocation and timely disbursement of funds.
- Explore private sector financing initiatives through PPPs.
- Fast track land compensation to project affected persons.
- Adequate sensitisation of stakeholders.

3.1.3. Air Transport Sub-Sector

The sub-sector aims to develop top-tier infrastructure to enhance access to aviation services. Through expansion, modernisation and effective management, it has significantly improved air transport safety, security and connectivity nationwide. Civil aviation plays a vital role as a catalyst for both global and national development. In Kenya, air transport has experienced steady growth, leading to job creation and fostering increased interaction and trade with other countries.

a) Expansion and Modernisation of Aviation Facilities Programme

The programme is aimed at improving passenger handling capacity to at least twenty million with requisite security, safety and customer service quality standards.

Objective: To expand and modernise JKIA, MIA, Kisumu International Airport, scheduled airstrips countrywide and Air Navigation Services Equipment.

Implementing Agencies: Kenya Airports Authority and Kenya Civil Aviation Authority (KCAA).

Table 3.3: Air Transport Sub-Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievements FY 2020/21	Targets FY 2021/22	Achievements FY 2021/22	Remarks
Increased access to aviation services	Number of air passengers handled (international & domestic) per year (Million)	4.47	14	8.893	Target missed due to effects of COVID-19 containment measures.
	Volume of Air cargo handled per year (Total freight) (Million kgs)	357	417.4	380.157	
	Average availability of air navigation systems and equipment	99.1 percent	97 percent	98.05 percent	The ICAO recommended average level of availability is 97 percent. The country undertakes routine maintenance and modernisation of equipment and systems to achieve the target and enhance safety.

Source: State Department for Transport Annual Progress Report, FY 2021/22

Despite the missed targets for both air passengers and air cargo handled during the year under review, there was an impressive recovery from the effects of COVID-19 with growth realised in both passenger and cargo. Specifically, air passengers handled increased from 4.47 million in FY 2020/21 to 8.893 million in FY 2021/22 representing 99 percent growth. Similarly, volume of air cargo increased from 357 million kgs in FY 2020/21 to 380.157 million kgs in FY 2021/22 representing growth of 6.5 percent.

Project Progress: Achievements as at the end of FY 2021/22 were:

i. **Rehabilitation of Pavements (Apron) at JKIA:** The project was part of a wider initiative to improve passenger handling capacity and position JKIA as the Eastern Africa commercial airport hub. This project involved rehabilitation of the existing apron pavements by replacing asphalt concrete with rigid concrete at Terminal 1A for aircraft taxi lanes/ways. The project progress as at the end of the review period was 80 percent.

ii. **Pavements Rehabilitation at MIA**: This project was initiated to address pavement failure at MIA attributed to unstable sandy soils that had led to numerous sinkholes on the airside. This was to enhance safety and improve airside capacity. The scope of the work included Aircraft Ground Lighting, and taxiway rehabilitation works, which were completed, runways and aprons rehabilitation works, staff houses, slope stabilisation and rainwater management. The overall project progress as at the end of review period is 92 percent.

iii. **Runway Rehabilitation at Isiolo International Airport:** The Airport was developed to enhance air transport and ease accessibility along the LAPSSET Corridor. As part of the Government's strategy to unlock the socio-economic potential along the transport corridor, the Government recommended development of airports. During the review period, Isiolo Airport runway was rehabilitated and extended to 1.4km, a 100 percent completion rate.

iv. **Maintenance and Development of Airstrips Countrywide:** To increase handling capacity of airstrips countrywide, the following projects were undertaken and at various stages of completion as at the end of the review period: Runway Rehabilitation, Expansion & Security Fencing at Migori Airstrip at 100 percent; Rehabilitation Works on the Runway, Apron & Security Fence at Kitale Airstrip at 100 percent; Pavements Rehabilitation Works at Kakamega Airstrip at 100 percent; Rehabilitation and Expansion of Angama (Olkurruk) Airstrip at 15.4 percent; VIP Lounge at Nyaribo Airstrip at 88.5 percent; Reconstruction of Taxiway and Apron at Manda Airport at 57.6 percent; Reconstruction of Runway, Taxiway and Apron at Nanyuki Airstrip at 76 percent; Reconstruction of Runway, Taxiway and Apron at Lanet Airstrip at 65 percent; and enhancement of the Arrivals and Departures Lounges, Grade Parking at Kisumu International Airport at 100 percent completion.

v. **Other Projects**: Other projects that are planned for implementation during subsequent financial years include Rehabilitation of Kapenguria Airstrip, West Pokot; Runway and Apron Extension at Ukunda Airstrip; and Rehabilitation of Terminal Building at Wajir International Airport.

Implementation Challenges

- Inadequate financing for capital projects.
- Implementing projects on active airports causes interruption to regular operations.
- Engagement with external parties such as consultants and financiers takes time thereby affecting project completion.
- Inadequate skilled manpower in all facets of project implementation and management.
- Delayed land acquisition and resolution of boundary disputes.

Lessons Learnt

- Need for innovative financing solutions for capital projects.
- Sustaining collaboration in human capacity development on project management.
- Extensive private sector and stakeholder participation are critical in project implementation.
- Need for flexible procurement laws that allow innovation and creativity in project delivery.

Recommendations

- Explore alternative and innovative financing options such as PPPs.
- Involve all key stakeholders/ lenders in the entire project cycle.
- Continuous training to build human resource capacity.
- Integrate monitoring and evaluation into the organisation structure for tracking progress.
- Undertake feasibility studies before commencement of projects to mitigate against stalling, delays, and scope creep of projects.
- Involve the National Land Commission (NLC) at project formulation stage where land acquisition and compensation is important.

Nyaribo Airstrip VIP Lounge

Pavement rehabilitated at MIA

b) Improvements in Aviation Safety and Security

Project Name: Construction of Regional Centre for Aviation Medicine

The project entails construction of a building, equipping and operationalisation of Regional Centre for Aviation Medicine in the regulatory framework for aviation oversight.

Location: Nairobi, JKIA

Objective: To enhance aviation safety among EAC partner states through standardisation of the processes used for conducting medical assessment of aviation personnel who require to be licensed.

Implementing Agency: KCAA

Project Progress: The construction of the Regional Centre for Aviation Medicine was completed during the FY 2021/22 and officially handed over on 28th June 2022. The Centre is expected to provide an office block with a conducive environment for the provision of aviation medical services to aviation personnel requiring licensing in the EAC Region. The Centre will also provide office space where medical practitioners can meet, share information and ideas and resolve medical issues related to aviation personnel in the region for purposes of meeting safety requirements.

Front view of the Regional Centre for Aviation Medicine

Project Name: Installation of Air Traffic Management System at JKIA

This project entails installation of equipment for provision of air navigation and air traffic management services at JKIA.

Location: Nairobi

Objective: To maintain integrity of Air Navigation Service and enhance the expeditious flow of air traffic in Kenya's airspace.

Implementing Agency: KCAA

Project Progress: Procured a new air traffic management system which was installed at JKIA and commissioned. KCAA also enhanced maintenance and periodic calibration of Air Navigation Service equipment in all the eight manned airports and several field station sites in the country which contributed to an overall average availability of ANS equipment of 98.3 percent, which was above the ICAO recommended level of 97 percent. This has facilitated smooth landing, take off and enroute Communication, Navigation and Surveillance in the Kenyan Airspace. KCAA also installed and commissioned new Voice Communications & Control Systems

(VCCS) at JKIA, MIA, Malindi and Kisumu airports and commenced implementation of VCCS and Voice Logging Systems at Lokichoggio and Wajir airports. KCAA is also implementing the DME-DME constellation.

c) Aviation Training

Project: Installation of Training Equipment and Improvement of Physical Infrastructure at EASA

Location: Nairobi

Objective: To enhance the quality of civil aviation personnel.

Implementing Agency: KCAA

Project Progress: KCAA undertook various projects to improve physical facilities, create a conducive environment for training and build EASA capacity to provide global aviation training. These include installation of training equipment including power plant, laboratory testing and applied thermodynamics equipment. The Authority initiated the procurement of assorted training equipment including flight planning and briefing, instrument landing system, very high frequency omnidirectional range, and distance measuring equipment.

Meanwhile, EASA completed the new requirements of recognition as a Platinum Trading Centre of Excellence TPP Member by ICAO. Students' enrolment grew from 2,050 recorded in FY 2020/21 to 2,557 students (68 percent male and 32 percent female) in FY 2021/22.

Modern training laboratory at the East African School of Aviation

Implementation Challenges

- Delays in commencement of construction works caused by long time taken to obtain documentation and clearance necessary for accessing the construction site.
- Frequent changes in international requirements caused dynamic aviation safety and security threats and increased cyber security risks and threats.
- High cost of training aviation personnel leading to shortage of required technical staff.

Lesson Learnt

- Collaboration with other relevant lead agencies in the project cycle and availability of all third-party approvals should be done before commencement of any project.

Recommendations

- Enhancement of multi stakeholder engagement and collaborations with other relevant agencies during project conceptualisation and implementation.
- Ensuring that all third-party approvals are sought and availed before initiation of project implementation.

3.1.4. Ports Sub-Sector

This sub-sector aims to develop and manage an efficient, safe, and sustainable marine and inland waterways transport system in the country. The achievements for the sub-sector for FY 2021/22 are outlined below.

Table 3.4: Maritime Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Improved access to shipping and maritime services.	Cargo throughput in Dead Weight Tonnes (DWT) per year (Million tonnes)	36.05	37.3	33.62	Russia-Ukraine war, slow global economic recovery reduced cargo volumes coming through the Port of Mombasa. Further, handling of some conventional cargo such as clinker was reduced due to increase in local production.
	Containers handled in Twenty-foot Equivalent Units (million TEUs)	1.459	1.432	1.404	

Source: Kenya Ports Authority Annual Progress Report, FY 2021/22

Cumulatively, during the period under review, total throughput registered 33.62 million tonnes achieving 90.1 percent of the 37.3 million set target. Similarly, total container traffic declined to a record 1,403,894 TEUs achieving 92.9 percent of the targeted 1,511,000 TEUs. Transit traffic reached 9,523,000 tonnes during the period under review, declined by 8.3 percent as well as underperforming the forecasted target by 12.3 percent.

a) Improvement of Shipping and Maritime and Inland Waterways Facilities

The following projects were implemented under this programme:

Expansion of the Second Container Terminal Phase II

Location: Mombasa

Objective: To provide efficient and competitive port services to facilitate global trade.

Implementing Agency: Kenya Ports Authority (KPA).

Project Progress: Construction which involved development of Berth No.22 with a length 300 metres and 15 metres deep with annual capacity of 450,000 TEUs. This project was completed and handed over to KPA for operationalisation.

Aerial view of the completed Phase II of the Second Container Terminal

Implementation Challenges

- Unnecessary environmental and social safeguard concerns raised by stakeholders.
- COVID-19 containment measures which hindered movement of materials and labour.

Recommendation

- Provide budgetary allocation for conducting adequate stakeholders' sensitisation at all stages of projects cycle.

b) Lamu Port

The project entailed development of the 1st three berths at the Port of Lamu measuring 400 metres each, with a depth of 17.5 metres. Each of the three yards has 4,320 ground slots for dry containers and 1,340 reefer slots with a total annual container capacity of 1.2 million TEUs.

Location: Lamu **Objective**: As the anchor project of the LAPSSET programme, Lamu Port is to complement the Port of Mombasa and provide efficient and competitive port services to facilitate global trade.

Implementing Agencies: LAPSSET Corridor Development Authority, KPA, and Ministry of Roads and Transport.

Project Progress: Development of the first three berths was completed in April 2022.

Implementation Challenges

- Inadequate funding and high capital investment requirement to procure port handling equipment and systems (STS Cranes, RTG, Reach stackersect).
- Incomplete road network from Lamu Port to serve the South Sudan and Ethiopian markets.
- Land acquisition and compensation issues.
- Security threats.

Recommendations

- Review land acquisition process for large infrastructure such as the LAPSSET Corridor programme to minimise delays in project implementation.
- Strategic investment in security to safeguard projects.
- Enhance budgetary support especially for port handling equipment.

- Enhance public participation and stakeholder engagement.
- Promote alternative funding mechanisms such as the PPP model.

c) Development of Shimoni Port

The project entails development of a Semi Industrial Fishing Port with a capacity of 50,000 MTs at Shimoni through PPP arrangement. Phase 1 involves construction of a fish jetty measuring 75m by 30m with associated facilities such as fish processing plant, fish meal plant, cold storage and ice making plant, community fish auction market, access road, warehouses etc.

Location: Shimoni (Kwale County).

Objective: The project is expected to contribute to the development of the rural communities through enhanced fishing and its associated industry within Kwale County.

Implementing Agency: KPA

Project Progress: Contractor for construction works procured.

Implementation Challenges

- Presidential directive led to changes in scope of the project from initial plans.
- Payment of special dividends to the National Treasury affected the project budget.
- Lengthy decision-making processes due to involvement of many stakeholders.
- A legal dispute concerning the procurement process for the contractor led to a delay in commencement of construction of the project.
- Policy shifts/changes in Government policy affected implementation of the project due to changes in project scope and delivery.

Lesson Learnt

- Prioritisation of projects to ensure maximum resource mobilisation.

Recommendations

- Adhere to procurement laws and procedures to avoid legal disputes.
- Integrate stakeholder forums and engagements throughout the project cycle to resolve project issues.

d) Relocation of Kipevu Oil Terminal

Expansion of petroleum products infrastructure to meet the growing demand within the country and nearby countries is key for regional economic development. The project involved relocation of Kipevu Oil Terminal to a new site at Tsunza area to address the operational inefficiencies and capacity constraints at the bulk liquid berths. The project scope entailed development of four berths for handling large petroleum tanker vessels ensuring large economies of scale and enhancing efficiency in discharging petroleum oils thereby reducing ship waiting time and demurrage charges.

Location: Kilindini, Mombasa County

Objective: The current Kipevu Oil Terminal is too near to the new container terminal and for safety and capacity issues it necessitates relocation to a new site. The modern facility will handle bigger tankers, serve LPG needs and improve the capacity and efficiency of energy products' handling.

Implementing Agency: KPA

Project Progress: During the review period, the project was 100 percent completed and operationalised. The completed works provided a bigger terminal consisting of four berths with capacity to handle bigger vessels of up to 170,000 DWT.

Relocated Kipevu Oil Terminal

New Kipevu Oil Terminal

Implementation Challenge

- Delays in the supply and delivery of construction materials occasioned by COVID-19 pandemic.

Lessons Learnt

- Defining the scope of work at the beginning of a project is key in implementation.
- Enhancing stakeholder involvement during project conceptualisation ensures that the project solution meets the needs of the users.

Recommendations

- Foster close liaison between parent Ministry and the National Treasury to reduce the time taken to approve tax exemption requests.
- Integrate stakeholder forums and engagements throughout the project cycle to resolve any emerging issue.

e) Development of the Dongo Kundu Free Trade Port

The project entails construction of the first berth measuring 300m in quay length, depth of 15 metres and procurement of associated equipment to catalyse development of the Special Economic Zone (SEZ) at Dongo Kundu.

Location: Dongo Kundu, Mombasa County

Objective: Construction of the berth is aimed at supporting the proposed SEZ, one of the flagship projects under Vision 2030. The Port is expected to catalyse the setting up of the industries within the SEZ.

Implementing Agency: KPA

Project Progress: Detailed designs for the first berth completed.

Implementation Challenges

- Delays in implementation of Resettlement Action Plan (RAP).
- Lengthy decision-making processes due to involvement of many stakeholders.
- Escalation of the project cost due to the Russia-Ukraine War.

Lesson Learnt

- Enhancing stakeholder involvement during project conceptualisation ensures that the project solution meets the needs of the users

Recommendations

- Prioritise projects to ensure timely completion.
- Integrate stakeholder forums and engagements throughout the project cycle to resolve project issues.

f) Revamping Kisumu Port (Phase I)

The project involved revamping and modernisation of docking facilities, rehabilitation of yard areas, railway tracks and the link span, and berth.

Location: Kisumu County

Objective: To provide efficient and competitive port services to facilitate global trade.

Implementing Agency: KPA

Project Progress: Revamping of Kisumu Port was completed.

Implementation Challenges

- Complex PPP processes inhibited uptake of projects (especially small ports) by the private sector, due to the non-bankability of such small ports.
- Inadequate synergy among implementation partners reduced the speed in decision making, hence affecting the process of implementation.

Recommendations

- Enhance coordination of projects with multiple implementing partners to avoid slow implementation.
- Amend the PPP law to encourage uptake of the private sector of capital-intensive projects.

3.1.5. Energy Sub-Sector

The sub-sector plays a key role in ensuring rapid and sustainable development in the country. It focuses on the development of renewable energy sources, coal exploration and development, constructing energy infrastructure and building administrative capacity. The achievements of the sub-sector for the FY 2021/22 are as outlined below.

Table 3.5: Energy Sub-Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Increased power generation	National power generation capacity (MW)	2,977.9	4,192	3,076	The Sub-Sector has slowed down on power generation projects to balance electricity demand and supply.
	Proportion of national power generation capacity from clean sources (MW)	-	3,158	2,399.55	
Improved energy efficiency	Number of new companies adopting energy efficiency and conservation practices	-	50	-	
Universal connectivity	Number of households connected to electricity	8,283,461	9,763,921	8,919,584	The target was not met due to reduced budget for the last mile connectivity programme.

Source: Ministry of Energy Annual Progress Report, FY 2021/22

Power Generation

The power generation programme is implemented through several sub-programmes which include geothermal, wind, hydro, solar, thermal, co-generation, coal and nuclear. The sub-sector has been accelerating the development of energy from clean renewable sources in line with the international obligation of minimising the GreenHouse Gases as well as conserving the environment.

During the year under review, power generation capacity increased from 2,978MW to 3,076MW. Out of this, 2,400MW or 78 percent of the total energy generated was from renewable energy sources. The key sub-programmes/ projects implemented under this programme include:

a) Geothermal Development

i. 172.3 MW Olkaria V

Location: Nakuru County, Naivasha Sub-County, Olkaria Ward

Objective: To enhance capacity and security of electric power supply in Kenya by building a new geothermal power plant of 172MW capacity using state of art technology, thereby creating a conducive investment climate and enabling sustainable economic growth in Kenya.

Implementing Agencies: Kenya Electricity Generating Company (KenGen), Energy & Petroleum Regulatory Authority (EPRA), and Ministry of Energy

Project Progress: The project was completed, commissioned, and synchronised to the National Grid in FY 2019/20. During the period under review, management of the Defect Liability Period (DLP) for the Steam Field Development (Lot I), Power Plant (Lot II) and Switchyard & Transmission Line (Lot III) progressed through addressing punch list items, reported defects, and undertaking applicable remedial works. DLP for Lot I and III ended in June 2021 and March 2021 respectively.

172.3MW Olkaria V Power Plant

ii. 83.3MW Olkaria I Unit 6

Location: Nakuru County, Naivasha Sub-County, Olkaria Ward

Objective: To enhance capacity and security of electric power supply in Kenya by building a new unit of geothermal power plant of 83.3 MW capacity using state of the art technology, thereby creating a conducive investment climate, and enabling sustainable economic growth in Kenya.

Implementing Agency: KenGen

Project Progress: Project completed, commissioned and synchronised to the National Grid. The 30 days reliability run was completed on 5th June 2022, and Defects Liability Period commenced on 6th June 2022.

iii. 63MW Olkaria I Rehabilitation

Location: Nakuru County, Naivasha Sub-County, Olkaria Ward

Objective: The rehabilitation of Olkaria I Power Plant would see the replacement of the old major equipment (turbine and generators) with new modern ones. This would increase the lifespan of the three units by more than 25 years and power output from the current 45 MW to 63 MW.

Implementing Agencies: KenGen, EPRA, and Ministry of Energy

Project: During the period under review, Notification of Intent to Award the Engineer, Procurement, and Construction Contract was issued to the winning bidder on 17th September 2021.

Implementation Challenge

- Implementation delay occasioned by an application for review of the tender at the Public Procurement Administrative Review Board and appeals at the High Court and Court of Appeal. A new case was filed at the Constitutional Division of the High Court in April 2022, which is still pending.

iv. Menengai Geothermal Project

Location: Menengai

Objective: To develop 465MW of geothermal energy in phases (105 MW, 60 MW & 300 MW).

Implementing Agency: Geothermal Development Company (GDC).

Project Progress: 105 MW Menengai Geothermal Project - overall completion rate of 84 percent. Sosian Menengai Geothermal Power Limited) achieved financial closure and commenced power plant construction which was at 50.2 percent by June 2021 with June 2023 being the expected commercial date. The financial close of Quantum Power progressed to 95 percent while that of Orpower 22 progressed to 75 percent.

Implementation Challenges

- Delay in signing of the ADF-PRG Agreement for Quantum Power.
- Delay in provision of the Government letter of support for Orpower 22.

Lessons Learnt

- A coordinated inter-ministerial approach in provision of Government support measures is critical for effective project implementation.
- Training is critical in enhancing technical capacity for resource evaluation and drilling techniques.

Recommendation

- Continuous facilitation by the Ministry of Energy and National Treasury for signing of the ADF-PRG agreements and provision of the Government letter of support to Orpower22 (an inter-ministerial committee should be formed to coordinate the activities).

v. Bogoria-Silali Geothermal Project

Location: Bogoria-Silali

Objective: To develop 300 MW of geothermal energy (100 MW in each prospect Paka, Korosi & Silali).

Implementing Agency: GDC

Project Progress: Overall completion rate is at 26 percent comprising four wells drilled to completion; drilling of three ongoing wells, and maintenance and upgrade of the water supply system ongoing.

Implementation Challenges

- High community/ stakeholder expectation for social good.
- Project area insecurity.
- Insufficient counterpart funding.

Lessons Learnt

- Community/stakeholder engagement is critical for effective project implementation.
- Forensic due diligence for high valued contracts is critical.

Recommendations

- Ensure active community and National Government participation in social welfare support.
- Provide adequate counterpart funding.
- The Government should address security concerns in the project area.

b) Kenya Nuclear Research Reactor Project

The Nuclear Power and Energy Agency (N*u*PEA) commenced implementation of a research reactor project guided by the International Atomic Energy Agency's (IAEA) Milestone Approach. The Milestone Approach represents a sequential three phase development of 19 infrastructure issues and the completion of work at each phase forms the basis of evaluation and decision making on whether to proceed to the next phase. Currently, Kenya is in Phase 1 which entails a consideration of the project before launching the research.

Location: Nairobi

Objective: The KNRR project seeks to accelerate economic development and improve quality of life through the application of nuclear energy technology in scientific research, healthcare and industry. Specifically, KNRR facility will perform various functions including Education and Training; Radioisotope Production; Instrument Testing and Calibration; Neutron Activation Analysis; Material Structure Studies; Silicon Doping and Geochronology.

Implementing Agency: NuPEA.

Project Progress: NuPEA has been conducting a feasibility study for the Kenya Nuclear Research Reactor (KNRR) project. The study seeks to strengthen the national understanding of the obligations and commitments involved in the introduction of a sustainable research reactor programme. Further, the study aims to determine the potential of advancing capacity in nuclear science, technology and innovation in Kenya.

In the FY 2021/22, preliminary site survey and economic cost benefit analysis for the research reactor was undertaken; human resource requirements and project management options were determined and capacity development on research reactors undertaken.

Implementation Challenges

- Slow land access for the project.
- Delay in budget approval for the project.
- Inadequate legal and regulatory framework.
- Inadequate human and technical resources for the project.

Lessons Learnt

- Involvement of all key project stakeholders is instrumental for the successful implementation of the KNRR project.
- Strong Government support is crucial to the successful implementation of the research reactor project.

Recommendations

- Prioritise the KNRR project for consideration for foreign funding.
- Ensure access to the land at Konza to host the research reactor project.

c) Kenya Nuclear Power Programme

Location: Nairobi

Implementing Agency: NuPEA

Project Progress:

The following were achieved during the year under review:

i. **Site and Supporting Facilities:** Terms of Reference for owners' engineers were developed, and the Agency established and operationalised a regional office in Mombasa.

ii. **Electric Grid:** Finalised data collection on the Kenyan grid network for model upgrades through technical visits to the transmission network infrastructure; updated the Kenyan PSS@E model for contingency and fault analysis level and finalised grid integration studies by fault level analysis and conducted an economic analysis for the grid system update for Nuclear Power Plant integration for the preferred and alternate sites.

iii. **Reactor Technology Assessment**: The Agency conducted Reactor Technology Assessment and other energy options and their integration and developed a strategy for the establishment of the owner – operator and roadmap.

iv. **Industrial Involvement for the Nuclear Power Programme**: Draft localisation policy and strategy developed; conducted the first project activity assessment through subjecting the draft deliverables (industrial survey report and draft localisation policy) to internal review.

v. **Environmental Protection**: The Agency developed a strategy for Environmental Impact Assessment Technical Working Group members, developed a draft request for proposal for Environmental and Social Impact Assessment and a report on the role of nuclear power in the decarbonisation of the energy sector.

vi. **Human Resource Development (HRD)**: Undertook data collection and NPHR model development for labour analysis; undertook stella training for the stella users in HRD II and Nuclear Fuel Complex team; undertook mapping of technical institutions in the coastal region; 11 technical institutions within Kwale, Kilifi, Mombasa and Taita Taveta counties were visited and compiled the Coastal Region Institutional Mapping Report by incorporating data that was collected from 11 visited institutions; and developed HRD gap assessment report.

vii. **Emergency Planning:** In coordination with the National Emergency Response Organization reviewed the National Chemical, Biological, Radiological and Nuclear Response Plan and drafted a nuclear and radiological incident annex to the Response Plan.

viii. **Nuclear Fuel Cycle and Radioactive Waste Management:** Undertook training on Stella Architect Software for future modelling of the nuclear fuel cycle material analysis, reviewed and updated the draft Nuclear Fuel Cycle and Radioactive Waste Management Policy; and developed a dynamic material flow model of the open fuel cycle using the Stella model and developed a static model using an excel sheet.

ix. **Radiation Protection Framework:** Drafted international guidelines, requirements, and best practice on regulations essential for safe operation of Nuclear Power Plant.

x. **Nuclear Procurement:** Undertook training on prevailing national procurement laws and regulations and on the IAEA, web based nuclear procurement toolkit; developed a draft policy structure based on best practices IAEA procurement kit and drafted the nuclear procurement policy.

xi. **Nuclear Safety:** The Agency undertook capacity building on Nuclear Security and developed a mapping report on the various regional and international nuclear organisations.

xii. **Nuclear Security and Physical Protection:** The Agency co-hosted a Nuclear Security and Regulatory Infrastructure Workshop.

Implementation Challenges

- Lack of information sharing with technology vendors resulting in gaps in specific data required for decision making.
- Lack of adequate resources for eventual acquisition of land for sitting.

- Nuclear power projects require significant capital investments and Kenya's nuclear power programme faces funding challenges.
- Kenya's nuclear regulatory framework is relatively new, and the country lacks adequate technical expertise and capacity to effectively regulate the nuclear industry.

Lesson Learnt

- Specific information on a particular technology is important as it directly affects decisions on various infrastructure issues, i.e., reactor technology assessment, industrial involvement, siting, and electric grid.

Recommendations

- Exploit the opportunities presented by mutual agreements with vendor countries as a channel to establish a working relationship directly with technology vendors.
- Identify the most optimal nuclear reactor for investment in the country and develop requisite NPP infrastructure.
- Continuous capacity development for staff involved in nuclear infrastructure development.
- Explore various financing options such as public private partnerships, multilateral development bank loans, and sovereign wealth funds. This would help mobilise the necessary resources and attract private sector investment towards the programme.
- Ratify key conventions on nucleus power such as the Joint Convention on Spent Fuel Management and Radioactive Waste Management, Convention on Nucleus Safety, and Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.

Power Transmission

A total of 176.53km of transmission lines and associated sub-stations was completed against a total target of 274km. The 176.53km comprised 30km of 641 km 500kV HVDC Eastern Electricity Highway (Ethiopia – Kenya) Project; 52km of 431km 132kV Power Transmission System Improvement Projects constructed; 43.9km of 96km, 400kV double circuit Kenya – Tanzania Power Interconnection Project; and 50.63km of 96km 132kV Isinya - Namanga Transmission Line.

d) 400/220/132 kV Olkaria-Lessos-Kisumu Transmission Line

Location: Nakuru, Nandi and Kisumu

Objective: Strengthening the national grid, evacuate power from Olkaria to Western Kenya

Implementing Agency: Kenya Electricity Transmission Company (KETRACO)

Project Progress: 309km of transmission line completed and energised. The project is 100 percent complete.

e) Eastern Electricity Highway Project (Kenya–Ethiopia) 500kV HVDC Interconnector

Location: Marsabit, Nyandarua, Nakuru and Narok

Objective: To Facilitate power exchange between Ethiopia and Kenya

Implementing Agency: KETRACO

Project Progress: (a) Converter station completed and commissioning tests on-going (b) 641km transmission line completed. The project is 99.9 percent complete.

Converter Station for the 641km, 500kV Ethiopia-Kenya High Voltage Direct Current (HVDC) Transmission Line

f) 96km 400kV Kenya-Tanzania Interconnector

Location: Kajiado

Objective: To facilitate regional power exchange between Ethiopia, Kenya, Tanzania, the Southern Africa power pool and Sudan and Egypt in the North.

Implementing Agency: KETRACO.

Project Progress: All 248 towers foundations constructed; 247 of 248 towers erected; Stringing: The project is on-going and behind schedule at 43.9 percent completion.

g) 431km 132kV Power Transmission Improvement Project

Location: Kajiado, Machakos, Migori, Nyandarua, Bomet, Nandi, Laikipia, Baringo, Narok, Kitui, Makueni and Nakuru

Objective: Expand and reinforce the power system network in Kajiado & Migori counties and supply reliable power to Konza City.

Implementing Agency: KETRACO.

Project Progress: (a) 26.5km Bomet - Sotik and 33km Ishiara - Kieni lines completed in MTP II. (b) 42.5km Sultan Hamud and Mwingi - Kitui 45.6km stringing completed and energised in February 2019 and April 2021 respectively (c) 68km Olkaria - Narok Line completed and energised. 66km Kitui - Wote: All 198 tower foundations completed; 194 towers of 198 erected; stringing of 20.31km completed. 65km Lessos - Kabarnet; 185 of 186 towers erected; stringing of 59.162km completed. The project is on-going but behind schedule.

h) 96km 132kV Isinya-Namanga Transmission Line

Location: Kajiado

Objective: Connect load centres of Isinya and Namanga to National Grid to improve access to reliable power.

Implementing Agency: KETRACO.

Project Progress: All 299 tower foundations completed; 294 towers erected; Stringing of 53.6km completed. The project is on-going but behind schedule.

i) 247km 220kV Garsen - Hola - Garissa Transmission Line

Location: Tana River and Garissa

Objective: To supply reliable power to Hola, Bura and surrounding regions.

Implementing Agency: KETRACO.

Project Progress: Manufacture and delivery at 46 percent; 520 of 582 tower foundations constructed; 335 of 582 towers erected. The project is on schedule.

j) 400/220 kV Mariakani Substation

Location: Kilifi

Objective: To step up voltage to 400kv for the existing 220kV Mombasa - Nairobi transmission line to improve power transfer capacity.

Implementing Agency: KETRACO.

Project Progress: Implementation is on schedule with a completion rate of 88 percent.

k) Nairobi Ring 220/66kV Substations

Location: Kajiado, Machakos and Narok

Objective: Provide alternative substation to supply Nairobi, evacuate power from Olkaria to Nairobi and facilitate power exchange between Ethiopia, Kenya, Tanzania and Southern Africa.

Implementing Agency: KETRACO

Project Progress: (a) Malaa Substation on-going at 93 percent (b) Kimuka on-going at 99 percent completion tower foundations c) 4km line - in line - out Suswa - Isinya 400kV to Kimuka Substation: 4 towers foundations of 12 constructed. The project is on-going but behind schedule.

Implementation Challenges

- Wayleaves acquisition challenges that have led to work stoppages.
- Inadequate budgetary allocation and delays in exchequer disbursement has led to delays in projects implementation.
- Expiry of loan for Garsen - Hola - Garissa project.
- Vandalism of transmission infrastructure.

Lessons Learnt

- Timely acquisition of wayleaves before project construction is critical for timely completion of projects.
- Transmission infrastructure security should be enhanced.
- Stakeholder involvement and participation during planning and implementation is important for community buy-in of projects.

Recommendations

- Adequate budgetary allocations for under-funded projects
- Timely disbursement of exchequer funds to facilitate effective project execution.
- Negotiation of new loan facility upon expiry of loan agreement.
- Maintain close engagement with all stakeholders.

Power Distribution

a) Distribution Network Expansion and Improvement

Location: Nationwide

Objective: To increase electricity access and reliability through upgrading and expansion of distribution network and associated infrastructure.

Implementing Agencies: Rural Electrification and Renewable Energy Corporation (REREC), and Kenya Power and Lighting Company (KPLC).

Project Progress: A total of 7,239.3km of High, Medium and Low Voltage lines was constructed. This comprised 1,839.58km of high and medium voltage lines and 5,399.74km of low voltage lines. One new substation (Gatakaine) was constructed and five substations (Kitui, Kisian, Sagana and Kanyakina) were upgraded. This enhanced load growth, reduced technical power losses and provided alternative supply points that ensured power reliability.

To improve power supply reliability and quality, some of the initiatives implemented include the refurbishment and upgrade of the distribution system, automation of power systems and mechanisation of labour-intensive technical operations. As a result of the above initiatives, power supply reliability improved significantly from a Customer Average Interruption Duration Index (CAIDI) of 5.55 hours in June 2017 to 2.76 hours as of June 2022, the System Average Interruption Frequency Index was 3.18 hours while the System Average Interruption Duration Index was 8.71 hours. CAIDI indicates the average outage duration that a customer would experience was 2.76 hours.

33/11kv, 7.5MVA Gatakaine Substation, Murang'a County

Electricity Connectivity

The following projects were implemented under this programme during the FY 2021/22:

a) Last Mile Connectivity Project

Location: Nationwide

Objective: To improve socio-economic development through connecting electricity to both households and public facilities.

Implementing Agencies: KPLC, EPRA, REREC, and Ministry of Energy.

Project Progress: During the period under review, a total of 168,883 new customers were connected to the grid during implementation of these projects by both KPLC and REREC.

b) Public Street Lighting Project

Location: Nationwide

Objective: To stimulate a 24-hour economy and promote security.

Implementing Agencies: KPLC, EPRA, REREC, and Ministry of Energy.

Project Progress: During the period under review, 21,823 streetlights were installed, which include 20,120 lanterns done by KPLC and 1,670 lanterns by REREC. The lanterns by REREC included 847 solar streetlights and 823 grid connected streetlights. The sector further installed 33 high masts in various counties. This raises the cumulative number of lanterns installed to 191,601.

c) Electricity Connection to Public Facilities

The project aims at enhancing electricity connection to public facilities that include public primary schools, secondary schools, and polytechnics; administration offices; churches and mosques; coffee and tea buying centres and processing plants; health centres and dispensaries: markets and trading centres; beaches; police posts; and water points and boreholes among others.

Location: Nationwide

Objective: To accelerate electricity connection both on-grid and off-grid to public facilities to enhance service delivery.

Implementing Agencies: REREC, EPRA, KPLC, and Ministry of Energy

Project Progress: A total of 1,238 public facilities were connected to electricity.

b) Alternative Energy Sources and Technologies

These programmes promote alternative clean renewable energy sources with the aim of reducing overdependence on raw biomass thereby contributing to the conservation of the environment. The programmes include electricity access through solar and wind; construction of institutional and domestic biogas systems; construction of small hydro power plants; installation of standalone home solar systems; clean cooking solutions; and reforestation of hydro dam's water catchment areas and water towers among others.

Location: Nationwide

Objective: To promote new and alternative sources of clean energy and technologies for socio-economic development.

Implementing Agencies: Ministry of Energy, REREC, KPLC and EPRA.

Project Progress: During the year under review, 24 schools were installed with solar systems including 16 primary and eight secondary schools; maintenance of solar PV systems installed in public schools under the digital literacy programmes was undertaken in 201 primary schools; 110 hectares comprising of 100ha in Muringato Nyeri County and 10ha in Maragoli Hills Vihiga County of hydro-dams water catchment areas were planted with trees; 500 hectares of afforested hydro dams water catchment areas were maintained; 55 woodlots were established in the hydro dam catchment areas; 70 woodlots were maintained in Endebess Constituency, Trans Nzoia County; two vandalised wind masts were rebuilt; 20 investment grade audits and General Grade Audits were undertaken; 110 domestic biogas digesters were constructed; six efficient charcoal kilns constructed; six Renewable Energy Technologies demonstrated at Energy Centres. These include solar PV, solar thermal, biogas, charcoal kilns, improved cookstoves and fireless cookers, tree nurseries; A total of 32,277 standalone solar home systems were installed under the Kenya Off Grid Solar Access Project; 3,656 clean cooking units disseminated; and baseline study on green hydrogen potential in Kenya conducted.

c) Capacity Building in Renewable Energy and Energy Efficiency

Objective: The capacity building seminars, awareness posts and updating of the portal as essential knowledge management interventions.

Implementing Agency: EPRA

Project Progress: The sector conducted two capacity building forums on energy efficiency; one virtual and one physical forum at Movenpick Hotel, Nairobi in partnership with Technical University of Denmark and Ministry of Energy.

Implementation Challenges

- Encroachment of land reserved for infrastructure projects.
- World political events and the global economic slowdown affected the uptake of services of the sector i.e. air and marine transport.
- Incomplete inland infrastructural connections to the Lamu Port hindering the growth of Lamu Port.
- Policy shift/changes such as the merger of Kenya Ferry Services with KPA created financial strain on KPA.

- Lengthy process of acquisition of sites and wayleaves.
- Vandalism of infrastructure facilities created additional costs for maintenance and restoration.
- Delay in issuance of specific tax exemptions resulting in lengthening of clearance of materials at the ports.
- Legal and contractual issues impact adversely on project implementation.

Lessons Learnt

- Deployment of technical officers to the regions /county level has contributed to effective coordination and implementation of national and county government projects across the country.
- Public participation in project management is critical in ensuring the sustainability of projects/programmes.
- Disaster preparedness plans are vital in averting and mitigating the effects on projects' implementation.
- Leveraging on landed assets would greatly improve financial status and support rail operations.

Recommendations

- Safeguard Government land and infrastructure facilities such as power infrastructure projects including substations and strategic points along the major transmission lines and networks to minimise security threats.
- Mobilise alternative financial resources through PPP, infrastructure bonds and green financing to finance development of infrastructure projects.
- Provide reimbursement of subsidies to ensure efficiency in service provision.
- Leverage emerging technologies to increase energy demand.

3.2. INFORMATION, COMMUNICATION & TECHNOLOGY

"Leveraging ICTs for Increased Competitiveness"

The Kenya Vision 2030 identified Information and Communication Technology as a key enabler for the country's growth. The sector continues to play a key role in accelerating the achievement of the Vision 2030, the "Big Four" Agenda and other development initiatives. The sector will position the country to take advantage of the Fourth Industrial Revolution that brings together digital, biological, and physical technologies. This will largely depend on the quality of ICT in national infrastructure, regulatory and business environment, human capacity, ICT usage and investment among others. Based on this understanding, the Government has prioritised investments in the ICT sector and its application in critical sectors such as financial intermediation, e-commerce and governance. These trends are being accelerated under MTP III.

During the review period, the sector contributed 2.4 percent of the total GDP (KNBS, Economic Survey, 2021). As an enabler, ICT contributed immensely to improved market competitiveness of the country's products and services and boosted Kenya's ranking on the ease of doing business index, further increasing the country's attractiveness as a destination for Foreign Direct Investments. The sector's key achievements are as summarised in Table 3.6 below:

Table 3.6: ICT Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Universal access to information	Mobile network coverage (percent)	97.00	98.00	98.00	Planned target achieved.
	Proportion of the population with internet connectivity (percent)	95.00	90.00	97.00	Continued roll out of 3G, 4G and 5G mobile transmitters has enhanced the quality of mobile broadband across the country.
	Proportion of the country covered by digital TV signal (percent)	91.20	95.00	92.00	The roll out of DTT has slowed down due to coverage in hard-to-reach areas.
	Proportion of households with access to Radio (percent)	76.56	99.00	96.00	Explain the variance between planned target and actual achievement
	Bits per second per capita	62,000	22,500	102,402.2	This was attributed to increased investments by operators which rose from KSh. 35.6 billion in 2020 to KSh. 45.9 in 2021.

Source: State Department for Broadcasting and Telecommunication Annual Progress Report, FY 2021/22

The increase in mobile network coverage from 97 percent in FY 2020/21 to 98 percent in FY 2021/22 was largely driven by the rollout of basic voice infrastructure 2G Connectivity in 16 unserved and underserved sublocations. The proportion of the country covered by digital TV signal improved from 91.2 percent in FY 2020/21 to 92.0 percent in FY 2021/22. Similarly, the proportion of households with access to radio increased from 76.56 percent in FY 2020/21 to 96 percent in FY 2021/22 although the intended level of access (99 percent) was not realised.

3.2.1. National ICT Infrastructure Programme

The programme seeks to improve universal access to ICT services. It involved connecting Kenya to the international broadband highway as well as connecting all major towns in the country. During the year under review, the following projects were implemented:

a) National Optic Fibre Backbone Infrastructure (NOFBI)

Location: Nationwide

Objective: To extend by an additional 2,500km of fibre connecting at least 290 offices at the sub-county level, educational centres, Level Four and above hospitals, police stations and other key county government offices.

Implementing Agencies: Ministry of ICT, and ICT Authority (ICTA).

Project Progress: A total of 500km of fibre network cables was laid under the NOFBI project and all 47 County Government Headquarters and National Government Headquarters are now connected to NOFBI under the Last Mile County Connectivity Project. In addition, a total of 600km of fibre Network from Eldoret to Lodwar were rehabilitated under the East Africa Trade Facilitation Project.

b) County Connectivity Project Phase III

Location: Nationwide

Objective: To interconnect all 47 counties through a last mile wired and wireless network into one homogenous governmental network.

Implementing Agency: Ministry of ICT.

Project Progress: In the FY 2021/22, maintenance of the infrastructure was done, following the connection of all the 47 County Government and National Government Headquarters in the FY 2020/21, as set out in the MTP III. Cumulatively, 610 Government buildings were connected to the NOFBI under the last mile county connectivity project.

c) Government Common Core Network (GCCN) Programme

Location: Nationwide

Objective: To enhance connectivity to provide MDAs with a robust, reliable and secure government core connectivity network and a redundant link.

Implementing Agencies: Ministry of Interior and Coordination of National Government, and Ministry of ICT.

Project Progress: The GCCN system was redesigned and expanded to provide a robust, reliable, and secure government core connectivity network and redundant link to all MDAs.

d) Integrated Government Unified Communication System Project

Location: Nationwide

Objective: To provide a platform for Government officials to share information more securely, efficiently, and effectively. It entailed expanding and upgrading the system with new features like calendaring and active directory to all MCDAs.

Implementing Agencies: ICTA, and Ministry of ICT.

Project Progress: During the year under review, the Integrated Government Unified Communication System was expanded and upgraded in 25 out of the targeted 312 MCDAs. The remaining 287 MCDAs will be implemented in the MTP IV period.

e) Eastern Africa Regional Transport, Trade and Development Facilitation Project

Location: Nationwide

Objective: The project, which involves laying of 600km Fibre Optic Cable from Eldoret to Nadapal at the common border with South Sudan, aimed to extend the geographic reach of Fibre Optic Cable network to improve service delivery in the Northwestern part of Kenya and disruption of broadband connectivity while the construction of the main cable is underway.

Implementing Agencies: Ministry of ICT, and ICTA.

Project Progress: A total of 200km out of the targeted 600km of fibre network was rehabilitated from Eldoret to Nadapal at the common border with South Sudan. This project commenced in FY 2020/21.

f) Northern Eastern Corridor Transport Improvement Project

Location: Northern Eastern, Kenya

Objective: To connect institutions and communities along the Northern Eastern Road corridor between Isiolo and Mandera.

Implementing Agency: ICT Authority.

Project Progress: The project was not implemented due to budgetary constraints. The project will be implemented in the MTP IV period.

g) Digital Terrestrial Television Coverage

Location: Nationwide

Objective: To cover 22 percent of the Country

Implementing Agency: Communications Authority of Kenya (CA), and Broadcasting Signal Distributors (Signet).

Project Progress: The Authority monitored the roll out of the Digital Terrestrial Television (DTT) coverage to unserved and underserved areas. As of 30th June 2022, the DTT population coverage stood at 92 percent. The increase is attributed to roll out of additional DTT transmitters in Kapenguria and Bomet by Signet Signal Distributor Limited and GoTV Kenya Limited respectively.

h) Migration from Medium Wave (FM Radio Transmission)

Location: Nationwide

Objective: To migrate from Medium Wave to FM radio Transmission by installing 12 transmitters

Implementing Agency: State Department for Broadcasting and Communication

Project Progress: The migration from Medium Wave to FM transmission was at 95 percent. Five transmitters were installed out of the 12 transmitters. Finalised the National Radio Frequency Spectrum Policy.

i) e-Waste Management Centres

Location: Nationwide

Objective: To establish e-Waste Management Centres in six economic zones across the country.

Implementing Agency: Ministry of ICT

Project Progress: Two e-waste centres were established.

j) National Addressing System

Location: Nationwide

Objective: To provide infrastructure for commerce

Implementing Agency: Ministry of ICT

Project Progress: Developed the Draft National Addressing System of Kenya Policy and the Draft National Addressing System of Kenya Bill. The two instruments will provide a policy for developing the National Addressing System and improve the uptake of commerce.

k) Data Disaster Recovery Centre

Location: Nationwide

Objective: To safeguard Government data

Implementing Agency: Ministry of ICT

Project Progress: The project is still pending implementation.

3.2.2. National Information Security Programme

Location: Nationwide

Objective: The programme involved implementation of security policies and deployment of firewall at all gateways; development and implementation of security framework for the entire Government of Kenya (GoK) Cloud; and establishment of Cyber Security Research Institute aimed to enhance the GCCN Security and reduce cyber-attack incidents.

Implementing Agency: Ministry of ICT and Ministry of Interior and Coordination of National Government.

Project Progress: Through the National Kenya Computer Incident Response

Team-Coordination Team (KE-CIRT/CC), a total of 444,055,806 cyber threats were detected compared to 158,404,552 in the previous year. This surge was attributed to the significant increase in targeted attacks at Information Technology/Operational Technology (IT/OP) enterprise and industrial operations and increased activity by organised cybercrime groups. To enhance the national cyber readiness and resilience in the face of the increased cyber threats, CA enhanced the capabilities of the National KE-CIRT/CC with new technologies to detect and analyse cyber-attacks. In addition, the Authority enhanced the National KE-CIRT/CC Digital Forensics Laboratory for purposes of research, as well as facilitating the investigations and prosecution of cybercrime. In response to the detected cyber threat attempts, the National KE-CIRT/CC issued 7,973,129 cyber threat advisories to organisations to mitigate these cyber threats and enhance collective cyber resilience.

3.2.3. Universal Access to ICT Programme

Location: Nationwide

Objectives: To enhance universal access to ICT by providing broadband internet connectivity to public secondary schools and other educational institutions in the entire country

Implementing Agency: Communications Authority (CA)

Project Progress: Continued to support the provision of Internet connectivity services to 886 public secondary schools spread across 47 counties. The Communications Authority in partnership with the Foreign Commonwealth Development office undertook an end term evaluation of the USF funded Education Broadband connectivity project. The purpose of the assessment was to gauge the effectiveness and sustainability of the project.

Further, through the Universal Service Fund, the roll out of Voice Infrastructure in unserved and underserved areas of the country was done in additional 16 sub-locations. This brought the total number of sub-locations to 91 both under Phase I and Phase II of the project.

Implementation Challenges

- Community resistance experienced in some of the marginalised communities resulted in delayed implementation of the planned project.
- Vandalism and damage to ICT infrastructure in some regions of Kenya affected the effective rollout of ICT infrastructure.
- Challenging terrain made it difficult to access some regions, slowing down the rollout of projects.

Lessons Learnt

- Community engagement is important – it is vital to engage local communities for project buy-in as well promote the security of the infrastructure deployed.
- Importance of partnership and collaborations with both public and private agencies that provide complementary project support such as energy, roads, security, water, environment, and other requisite project approvals, etc.

Recommendations

- Prioritise community engagement in all projects, especially in remote areas where there is a higher risk of vandalism and theft. This can be achieved through sensitisation and awareness campaigns aimed at promoting the value of the infrastructure and how it benefits the local community.
- The Communication Authority should collaborate with security agencies and other MCDAs in the implementation

process to foster ownership and responsibility.

3.2.4. E-Government Services Programme

Location: Nationwide

Objective: To enhance accessibility of Government records through digitisation of Government records; strengthening of the Kenya Open Data Initiative (KODI) to make public data sets accessible in a usable format and rollout of Digital Government Economy Programmes.

Implementing Agencies: Ministry of Interior and Coordination of National Government, and Ministry of ICT.

Project Progress: The digitisation of Government records was piloted in the Lands Department and is currently being expanded to all MCDAs. This will be implemented under MTP IV. Under KODI, the strategy was developed.

Implementation Challenges

- Vandalism of ICT and supporting infrastructure as well as unreliable and high cost of broadband services in Kenya limits access to ICT services and slows investment.
- Evolving forms of data and cyber security threats and abuse of social media.

Lessons Learnt

- Accelerating the development, approval and implementation of the various policies, legal and institutional reforms is key to the achievement of the projects.
- Developing supporting ICT infrastructure, skills and access to devices as well as provision of affordable broadband services will enhance uptake of BPO/Information Technology Enabled Services (ITES) and online jobs.
- Enabling access to ICT infrastructure in the unserved and underserved areas in the country will lessen the existing digital divide between the rural and urban areas as well as enhance uptake of BPO/ITES.
- Collaboration between MCDAs is key in successful and timely delivery of projects and programmes.

Recommendations

- Enhance investment in the broadcasting and telecommunications field through support to local startups and the development of incentive packages.
- Enhance cyber security to address emerging challenges and complexities which continue to present new security risks in the BPO/ITES industry.
- Classify communication infrastructure as critical national infrastructure for enhanced protection of the same and ease of sourcing for funds for project implementation.
- Provide support for Research and Development.
- Amend laws on destruction and vandalism of infrastructure.
- Provide adequate resources to lay the required infrastructure to attract investors.
- Develop, harmonise and review the policy, legal, regulatory, and institutional frameworks to administer the rapidly developing technologies in ICT.
- Promote development of digital economy in Kenya e.g., through E-Commerce, smartphone apps, collaboration platforms, digital banking.
- Enhance community and stakeholder engagement in the roll out of the ICT Universal Access programmes.
- Focus on promotion of access to knowledge, digital skills, local content and digital services among

the unserved, underserved and disadvantaged groups. This will entail building users' knowledge and capacity and developing content and applications for the users to appreciate and generate value through ICT services and products.

3.3. SCIENCE, TECHNOLOGY & INNOVATIONS

"Accelerating the transition to an Innovation-Led and Knowledge-Based Economy"

Science, Technology, and Innovation (ST&I) is key in unlocking Kenya's development potential and enhancing national security and public safety. Development and integration of ST&I across sectors of the economy through a whole government approach is, therefore, essential in accelerating economic transformation and increasing Kenya's competitiveness and employment creation. Adoption of ST&I helps social integration, sustainable development and wealth creation. Furthermore, strengthening ST&I capacity will facilitate Kenya's international cooperation in a rapidly globalising work environment.

Science, Technology, and Innovation is expected to drive the national development agenda by ensuring that all sectors of the economy have access to new technologies and adequate knowledge to increase productivity and efficiency. Considering climate change and rising pandemics, it is now clear that advances in ST&I will be a game-changer in responding to these challenges. Overall, the sub-sector achieved good performance across the outcome indicators (see Table 3.7).

Table 3.7: Science, Technology and Innovation Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Enhanced production of niche products and Pharmaceutical using indigenous knowledge	Number of patents and certification issued	-	22	510	Over achievement due to increased capacity of KIPI to process patent applications and adoption of ICT
	Niche pharmaceuticals produced and marketed	-	4	0	Target not achieved due to financial constraints
Improved technological innovation	Share of research and development as a percent of GDP	0.98	1.6	0.8	Budget reallocation towards COVID-19 pandemic
	Global Competitiveness Index (Rank)	95	87	95	Ranking remained at 95 since no ranking was done in 2021/22
	Global Innovation Index (Rank)	86	37	85	Kenya missed data for 14 indicators and had outdated data for nine indicators hence the low ranking

Source: State Department for University Education and Research Annual Progress Report, FY 2021/22

3.3.1. Nano-Sciences, Material Science and New Production Technologies Programme

This programme is aimed at building state-of-the-art infrastructure for high quality research and technology development.

a) The National Physical Science Research Laboratory for Engineering and New Production Technologies

The project involved incorporation of research centres for the following highly specialised emerging sciences: electronics, telecommunications, and computing; nuclear science for peaceful applications; and mining and mineralogy.

Location: Nationwide

Objective: To provide consulting, engineering, fabrication, and calibration services for both public institutions and private businesses.

Implementing Agency: Ministry of Education.

Project Progress: Three laboratory designs under the National Physical Science Research Laboratories for Engineering were developed (Material Science and Engineering; Theoretical and Computational Science; and Nanotechnology and Mineralogy laboratories).

b) Centre for Nanotechnology Research Laboratory

Location: Kenya Industrial Research and Development Institute (KIRDI), Nairobi

Objective: To establish infrastructure for nanomaterial science and technology, and industrial applications.

Implementing Agency: KIRDI

Project Progress: The Centre for Nanotechnology Research was at 80 percent completion level. Some staff have trained at master's and PhD level in nanoscience and related areas of material science.

Implementation Challenge

- Delays in exchequer release

Recommendations

- Increase financial allocation.
- Focus on capacity building.
- Prioritise completion of started projects.
- Phase out the implementation of the laboratories based on available resources.

3.3.2. Space Science Technology Development Programme

The programme aimed at enhancing the teaching, research and development of space science and subsequent use of space technology for peaceful purposes. The programme had the following three projects.

a) Centre for Microsatellite Technology Development

Location: Nairobi

Objective: To undertake advanced research in the areas of satellite technology development, manufacturing, launch and operation.

Implementing Agency: Ministry of Education, National Commission for Science Technology and Innovation (NACOSTI), National Research Fund, Kenya Space Agency and Universities

Project Progress: No progress was made at the Centre for Microsatellite Technology Development during the period under review. However, the Kenya Space Agency supported five universities to build capacity on space mission design and satellite development.

Implementation Challenges

- Limited technical capacity.
- Inadequate funding.

Lessons Learnt

- Stakeholder engagement is critical to ensuring coordination of the space industry.
- Establishing linkages between Government, industry and academia to build synergy and mobilise resources.
- Need to create awareness on the benefits of space science, technology and applications.
- Need to leverage international collaborations and beneficial partnerships to enhance capacity development.

Recommendations

- Provide adequate funding for the domestic space industry.
- Recruit and retain technical personnel.
- Train experts in space science, systems engineering and operations.
- Develop infrastructure to support the space industry.

b) The Square Kilometre Array

Project involved the acquisition of Longonot Earth Station acquired from Telkom Kenya for conversion into a radio telescope.

Location: Longonot Earth Station, Nakuru County.

Objective: To establish a large radio telescope with a node in Kenya to be used as a research facility for astrophysics, engineering, surveying, mathematics, and information technology to generate “Big Data” from astronomical observations.

Implementing Agencies: Ministry of Education, NACOSTI, National Research Fund, Kenya Space Agency, and universities.

Project Progress: Feasibility study on conversion of the communication antenna into radio telescopes was conducted; and three masters, four doctoral and two postdoctoral students were trained in South Africa on scholarships in Astrophysics and Astronomy. Further, facilities and courses on Astrophysics were established in Kenyatta University, Technical University of Kenya (TUK) and University of Nairobi (UoN) in partnership with Development in Africa with Radio Astronomy.

Implementation Challenges

- The project did not have a budget allocation.
- Inability to secure funding from the project resource partners.
- Electromagnetic and Radio Frequency Interference around the proposed site.
- Vandalised infrastructure at Longonot Earth Station
- Limited capacity in astrophysics and related sciences within the country/

Lessons Learnt

- The strategic importance of the Longonot Earth Station was noted and steps to acquire it commenced during the period.
- Establishing linkages between Government, industry, and academia

helps in building synergy and mobilise resources.

- Leveraging international collaborations and beneficial partnerships enhances capacity development.
- It is critical to secure land and control development in advance for proposed projects.

Recommendations

- Support the implementing agencies to source funding for specific aspects of the projects under their budgetary processes.
- Develop capacity in astrophysics and related sciences.
- Provide adequate land for the implementation of the radio telescope project.
- Create awareness on the benefits of space science, technology, and applications

c) Optical Astronomical Observatory

This observatory will undertake advanced research, training, and outreach in basic space science with relevance to astrophysics, mathematics, engineering, and technology.

Location: Nationwide

Objective: To establish a large radio telescope with a node in Kenya to be used as a research facility for astrophysics, engineering, surveying, mathematics, and information technology to generate "Big Data" from astronomical observations.

Implementing Agencies: Ministry of Education, NACOSTI, National Research Fund, Kenya Space Agency, and Universities.

Project Progress: No progress was made during the review period.

Implementation Challenges

- The project did not have a budget allocation during the period under review.
- Inability to secure funding from the project resource partners.

Lessons Learnt

- The strategic importance of the Longonot Earth Station was noted and steps to acquire it under Kenya Space Agency commenced during the period.
- There is limited capacity in astrophysics and related sciences within the country.

Recommendations

- Support the implementing agencies to source funding for specific aspects of the projects under their budgetary processes.
- Develop capacity in astrophysics and related sciences.

3.3.3. Energy Technologies Development Programme

The programme aimed at facilitating the diversification of the country's non-renewable and renewable energy mix to meet the energy demands for industrialisation and development, to ensure use of clean energy and increased energy efficiency. The projects implemented included.

a) Renewable Energies Research Laboratory

Location: Nationwide

Objective: To conduct advanced research and development in the areas of solar energy, wind energy and biofuels.

Implementing Agencies: Ministry of Energy, and NACOSTI

Project Progress: The project did not kick off due to lack of resources.

3.3.4. Science, Technology, Engineering and Mathematics Programme

a) Kenya Advanced Institute of Science and Technology

Location: Konza Technopolis

Objective: To facilitate human and infrastructure capacity building for the Institute.

Implementing Agency: Ministry of Education

Project Progress: The construction of the Kenya-AIST project commenced on 24th September 2021.The project progress was at 10 percent as of June 2022. Other achievements during the year under review were development, review, payment and uploading of the Kenya-AIST Curricula in the Commission for University Education website for accreditation; development of Kenya-AIST Strategic Plan; appointment of Dedan Kimathi University of Technology by Ministry of Education to assist the Kenya-AIST get its legal status.

Implementation Challenges

- Geotechnical conditions led to additional work carried out by the contractor (excavation, backfill, reinforcing steel, formwork, concrete and support) for the eight buildings.
- Delay in exchequer release.

Lesson Learnt

- Strong collaborations amongst stakeholders are essential in fast tracking the project implementation.

Recommendations

- Timely release of exchequer to pay the contractor and consultant of the project as per the agreement.
- The project implementing agency should reinforce monitoring and evaluation of the project.

b) Enhancement of the Centres of Excellence in Universities and Research Institutions

The project had two components:

i. Support to Higher Education, Science and Technology Project

This project jointly funded by the Government in collaboration with the African Development Bank was implemented from January 2013 to December 2021. It entailed the following sub-components:

- Supply of engineering and applied science training and research equipment through which eight universities were provided with equipment to support teaching, training, and research in the field of engineering and applied sciences. The beneficiary universities were University of Nairobi, Multimedia University, Dedan Kimathi University of Technology, Technical University of Mombasa, Masinde Muliro University of Science and Technology, Technical University of Kenya, Meru University of Science and Technology, and South-Eastern Kenya University.
- Provision of scholarships to train university teaching staff and technicians

at master's and doctorate levels in Engineering and Applied Sciences in Kenyan public universities to improve the quality of engineering programmes. In the year under review, 92 students graduated with either Masters or PhD degrees while 46 technicians graduated with bachelor's degree.

- Training in University Management and Council on governance and strategic management.
- Construction of Wangari Maathai Institute, a teaching and learning Centre offering Masters and PhD programmes in Environmental Governance and Environmental Impact Assessment and Audit.

Location: Eight universities: University of Nairobi, Multimedia University, Dedan Kimathi University of Technology, Technical University of Mombasa, Masinde Muliro University of Science and Technology, Technical University of Kenya, Meru University of Science and Technology, and South-Eastern Kenya University.

Objective: To strengthen capacity in teaching Science and Engineering in public universities

Implementing Agency: Ministry of Education.

Project Progress: Overall implementation was 95 percent. Eight universities were provided with equipment to support teaching, training, and research in the field of engineering and applied sciences. A total of 92 staff graduated with Masters and PhD. Construction of Wangari Maathai Institute at UoN was completed.

Implementation Challenges

- Student unrest in 2016, 2017 and 2018 caused disruptions that forced the universities to close for a prolonged time.
- The implementation of the project involved multi-agency coordination and collaboration. Management and implementation of the project activities suffered delays due to the complex decision-making layers in the public service.

Lesson Learnt

- High turnover of technical staff due to retirements, exits, and morbidity.

Recommendations

- Integrate succession planning in project planning and implementation to strengthen human capital development and ensure smooth transition in instances of exit of staff.
- Sensitise project beneficiaries for buy-in and ownership.

ii. Africa Higher Education Centres of Excellence Phase II (ACE II)

Location: Three universities: Moi University, Egerton University, and Jaramogi Oginga Odinga University of Science and Technology

Objective: To strengthen higher education institutions, to deliver quality post-graduate education and build collaborative research capacity in two Big Four Agenda areas of agriculture and food security and manufacturing.

Implementing Agency: Ministry of Education.

Project Progress: During the year under review, the improved Centres of Excellence in the three universities and research institutions were at 70 percent completion level. During the MTP III period, the project enrolled over 400 Masters students (320 Kenyans) and over 150 PhDs (120 Kenyans).

Implementation Challenges

- Lack of regional and international accrediting bodies.
- Inadequate outreach and knowledge dissemination.
- Limited capacity for policy deliberations, development and implementation.
- Weak partnerships and collaboration within the region.
- Inadequate private sector engagement.
- Unstable innovation/incubation centres.

Lessons Learnt

- Result based financing model and results management promotes project's success.
- Global action for the attainment of SDGs must be informed by research and investment in high- level skills at postdoc and beyond.
- Adequate and sustained funding is critical for the promotion of Science, Technology, Engineering and Mathematics (STEM) in the region.
- Collaboration across different disciplines and institutions enhances the diversity and impact of research and education.
- Provision of counterpart funding for the project monitoring and evaluation helps in project implementation.
- Project alignment with national and regional development goals and priorities is an essential research outcome.
- Embedding centres of excellence in the host institutional structures in the areas of specialisation offer sustainability.

Recommendations

- Establish a regional accreditation body.
- Verify outreach beneficiaries be done by a local company.
- Establish outreach and knowledge dissemination channels to enhance accessibility, joint regional discourses, project publicity, feedback, and virtual outreach.
- Enhance capacity of researchers, graduate students and government officers on policy development, review, and implementation.
- Establish consortia of higher Education Institutions for scaling up best practices in the region.
- Enhance accreditation of quality programmes and activities.
- Enhance collaboration and linkages in key thematic areas for knowledge co-creation, innovation and adoption.
- Develop a framework for private sector inclusion in research.
- Establish model innovation and incubation centres for product development, business start-ups and commercialisation.

c) National Skills Inventory and Audit for ST&I

Location: Nationwide

Objective: The project will establish a database on the status of the national ST&I human resource capacity and skills in science, engineering and technology in relation to the job market needs. This will inform the development of a National Critical Skills Development Strategy.

Implementing Agency: NACOSTI.

Project Progress: No achievement was made during the review period.

Implementation Challenge

- Inadequate funding of the projects.

Recommendation

- The heads of the lead agencies should work in tandem with lead ministries to deliver on the projects.

d) The African Science, Technology, and Innovation Observatory

Location: Nationwide

Objective: To facilitate the establishment of the Kenyan node of the African Science, Technology and Innovation Observatory for the collection, analysis and reporting on ST&I indicators.

Implementing Agency: Ministry of Education.

Project Progress: National Science, Technology and Innovation Observatory concept note was developed. The level of equipping the observatory node and database populated was 44 percent complete.

Lesson Learnt

- Disbursement of small amounts of the budget requested could affect the project adversely.

Implementation Challenge

- Limited funding to support the development of infrastructure.

e) Model STEM Schools Programme

Location: Nationwide

Implementing Agencies: Ministry of Education, Centre for Mathematics Science and Technology Education in Africa (CEMASTEA), and NACOSTI

Objective: The programme aims at enhancing the capacity of education institutions (secondary schools) to provide STEM education by facilitating the provision of support with modern and high-end STEM equipment and training for STEM teachers and school principals. In addition, it aims to promote experiential learning, innovation, creativity and attraction into STEM-related disciplines through well-coordinated programmes in education, research and development, knowledge management and training in all aspects of ST&I from early childhood, primary and secondary education levels of education.

Project Progress: During the period under review, 1,805 secondary mathematics and science teachers were trained on ICT integrated in teaching and learning; 349 mathematics and science teachers were trained on STEM education; 101 STEM model school principals were trained on pedagogical leadership; conducted STEM educational activities at CEMASTEA for 609 learners and teachers from primary and secondary schools; published one Practitioners Journal in STEM education; held one STEM robotics and coding boot camp; developed a coding manuscript on STEM education; disseminated four STEM teaching and learning innovations during various forums and successfully piloted STEM outreach programmes that complement the school education visits.

Implementation Challenge

- Delayed provision of STEM equipment

Lessons Learnt

- Increased training and multi-pronged programmes such as boot camps and science fairs and symposia have the potential to motivate learners and increase uptake of STEM subjects.

- Equipping schools with resources leads to improved teacher classroom practices and learning achievement in STEM subjects.
- Innovative teaching and learning strategies that integrate projects and real-life application of knowledge and skills leads to increased interest in STEM subjects.

Recommendations

- Develop STEM strategy for secondary education for global competitiveness.
- Strengthen collaboration and partnership in STEM education particularly in research, innovation and talent development.

f) Coordination of Technology and Innovation Commercialisation Programme

Location: Nationwide

Objective: To harness the potential offered by modern science and technology for social and economic advancement.

Implementing Agencies: Ministry of Education, and Kenya National Innovation Agency.

Project Progress: A Science and Technology Park was established at the Dedan Kimathi University of Technology and the construction works were at five percent.

Implementation Challenges

- Inadequate budgetary allocation.
- Mismatch between skills acquired by university graduates and industry requirements.
- Inadequate infrastructure and equipment for research, higher education, and training institutions especially for physical science.
- COVID-19 containment measures delayed project implementation.

g) Research, Science, Technology and Innovation

Location: Nationwide

Objective: To advance science, technology, and innovation for sustainable national development

Implementing Agency: National Research Fund.

Project Progress: 117 projects were funded amounting to KSh.254.4 million.

Implementation Challenges

- Declining allocation for research, science, technology and innovation programmes has translated to a low national research and development expenditure of 0.8 percent against the target of two percent of GDP.
- Inadequate research and innovation infrastructures in most public research institutions and universities.
- The implementation period for the research projects is three years. COVID-19 interrupted the implementation of research projects. The unexpected disruption caused by the COVID-19 pandemic significantly impacted the implementation of research projects.

Lesson Learnt

- Diversification of funding streams beyond the National Treasury is critical in the implementation of projects.

Recommendations

- Enhance exchequer funding for research as stipulated in the Science, Technology, and Innovation Act of 2013 (STI Act 2013).

- Proactively mobilise resources such as external funding or exploring alternative revenue streams, to ensure sustainable implementation of a strategic plan.

3.3.5. Biotechnology and Bioscience Programme

The overall objective of this programme is to build Kenya's capacity to develop and safely apply biotechnology and biosciences in agriculture, health, mining, industry, and environmental conservation. The programme seeks to undertake advanced stem cell research and regenerative medicine to address the need for new therapeutic and interventional approaches to Non-Communicable Diseases.

a) Centre of Excellence for Stem Cells Research, Synthetic Biology and Regenerative Medicine

Location: Kenya Medical Research Institute, Nairobi

Objective: To establish a Centre of Excellence for Stem Cells Research, Synthetic and Regenerative Medicine.

Implementing Agency: KEMRI

Project Progress: During the review period, the Laboratory was upgraded and equipped with the following equipment: BDFACs Cell Sorter, Next Generation Sequencer, CO2 Incubator, Class A2 Biosafety Cabinet, Medical Freezer, Centrifuge (refrigerated) and Cryogenic storage Dewars; 13 scientists, two PhD and one Masters student trained on stem cell research; and four research studies on stem cell research are ongoing, generation and characterisation of stem cells, downstream application of characterised cells in diabetic foot ulcers and visceral leishmaniasis.

b) Manufacture of Pharmaceuticals through Public Private Partnership Initiative

Location: KEMRI, Nairobi

Objective: Manufacture of pharmaceuticals through public private partnership initiative and development of indigenous technologies for manufacture of niche products.

Implementing Agency: KEMRI

Project Progress: To promote indigenous technologies and home-grown innovations, KEMRI conducted biomedical research on natural products with focus on use of pyrethrum grown in Kenya for its safety for insecticidal and antimicrobial applications. The main research activities under the Pyrethrum Project included studies on efficacy for prevention and treatment of jiggers.

To boost local capacity in innovation and production of health products, KEMRI developed 12 products with three having been commercialised. The commercialised products include COVID-19 Viral Transport Media with 26,000 utilised in the health sector, COVID-19 proficiency testing kits and COVID-19 Polymerase Chain Reaction (PCR) test kits.

The Institute also embarked on development of a fractionated dose regimen vaccine for yellow fever vaccine. The development is in the final stages of evaluation. Other products under development include: -

i. A reverse transcriptase loop amplification isothermal PCR for YFV was developed at KEMRI-PD.
ii. Domestication of differential diagnosis assays by PCR for YFV, RVFV, DENV, CHIKV, ONNV and WNV using established protocols.
iii. Enzyme Linked Immunosorbent Assays (ELISA) for YFV e.g., indirect IgG ELISA, IgM capture ELISA and Ag detection ELIS.
iv. Large-scale production of YFV specific monoclonal antibody 2D12 and its subsequent use in Plaque and Focus Neutralization Assays.
v. Developed more MAbs that are awaiting field testing and large-scale propagation.
vi. Evaluation of a Loop-Mediated Isothermal Amplification assay for COVID-19 detection.

Implementation Challenges

- Human Resources capacity both in number and skills.
- Getting waiver/raising Value Added Tax (VAT) money which initially were not available in KEMRI.

Lesson Learnt

- Effective collaboration between the development partners and Government enhances implementation of projects and programmes.

Recommendations

- Increase funding for the programmes.
- Provide adequate funding to facilitate timely completion of projects.
- Enhance innovation and increase research output through commercialisation.
- Build capacity through training and acquisition of requisite equipment.

3.4. LAND REFORMS

“Globally Competitive Sustainable Land Management”

Land has been identified as a critical resource in the attainment of the Kenya Vision 2030 and other national development priorities. The sector, therefore, focuses on improving management of land resources in the country by focusing on formulation and implementation of policies relating to its allocation, distribution and utilisation.

The sector focused on improving access, tenure and management of land during FY 2021/22 to foster economic development in the country. This section presents the achievements of the sector's MTP III outcome targets, flagship projects and other programmes/projects.

Table 3.8: Land Reforms Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator	Achievement FY 2020/21	Target FY 2020/21	Achievement FY 2021/22	Remarks
Improved access, tenure and land management	Title deeds registered and issued	410,000	300,000	411,144	The target was surpassed due to increased land transactions
	Land parcels geo-referenced	50,269	300,000	28,400	Under-achievement was attributed to inadequate survey equipment and software as well as the budget cuts

Source: Ministry of Lands and Physical Planning Annual Progress Report, FY 2021/22

During FY 2021/22, title deeds registered and issued were 411,144, surpassing the planned target by 111,144 translating to an achievement of 137 percent. Land parcels geo-referenced were below the target due to various reasons and the sector seeks to review the implementation strategies to improve the achievement of this target during the FY 2022/23.

3.4.1. National Registration and Issuance of Title Deeds

The programme entails georeferencing of land parcels, issuance of title deeds for sectional property units; demarcation and registration of communities and community land as well as register land held under the Community Land (Group Representatives) Act, Cap 287; hasten the preparation of leases and approval of land development applications such as subdivisions, change of user, extension of leases, extension of user to realise issuance of ownership documents; fast track planning, surveying and issuance of title deeds for public schools; titling programme for public institutions and counties (MCDAs), urban and markets centres; regularisation of informal settlements and colonial villages; fast-track ascertainment of rights and interest on lands by finalising the declared adjudication sections and establishment of settlement schemes, settle squatters and the landless and regularisation of land ownership claims in urban centres through issuance of letters of allotment, renewal and extension of leases and for leased public land, recovery of irregularly allocated public land, and documentation of public institution land.

Location: Nationwide

Objective: To guarantee security of land tenure and land rights

Implementing Agencies: Ministry of Lands and Physical Planning (MoLPP), and NLC.

Project Progress: 411,114 title deeds were issued against a target of 400,000. The target was surpassed due to increased land transactions and presidential directive on national titling.

3.4.2. National Land Information Management Information System

This entails implementation of NLIMS including digitisation of all land registries to ensure effective and efficient access to land data.

Location: Nationwide

Objectives: To develop a transparent, decentralised, affordable, effective, and efficient geographical information system database for land information management. To develop a comprehensive public land inventory and databases.

Implementing Agencies: MoLPP and NLC.

Project Progress: NLIMS was developed, and Nairobi has since digitised while digitisation of land records and automation of land processes in Murang'a is ongoing. To decentralise land services, Nandi Land Registry was constructed while construction is ongoing in Naivasha at 65 percent, Samburu at 50 percent, Laikipia at 45 percent and Ngong at 12 percent completion.

Implementation Challenges

- Financial and budgetary constraints.
- Difficulties in accessing land records.
- Inadequate human capital and equipment.
- Frequent amendments to land laws.

Lessons Learnt

- Regular monitoring and evaluation is critical in project implementation.
- Effective communication, consultation, collaboration and cooperation are key to the attainment of the project's objective.

Recommendations

- Foster good rapport with all stakeholders on land governance matters.
- Enhance funding to facilitate full digitisation of land records.

3.4.3. Implementation of the National Spatial Plan

The National Spatial Plan provides a framework and vision that guides the long-term spatial development of Kenya (2015-2045). The plan addresses: uncoordinated human settlements; urban and rural development; disjointed and conflicting sectoral policies; economic development disparities; unsustainable use of natural resources and inefficient transport and infrastructure framework.

Location: Nationwide

Objective: To enhance a balanced growth and development of the country through optimal land use planning and management.

Implementing Agencies: MoLPP and NLC

Project Progress: Guidelines for implementation of National Spatial Plan (2015-2045), five sectors (National Resource and Environment, Human Settlement, Economy, Infrastructure and Transport) were developed and disseminated. In addition, guidelines for implementation of the National Land Use Policy were developed and disseminated to counties. The establishment and operationalisation of the National Council and the County Technical Implementation Committee are ongoing. Further, seven physical and land use development plans were prepared for strategic national projects; Olkalou, Kibera Soweto, Dongo Kundu, Kapsabet Municipal, Lodwar Town and Konza Technopolis.

3.4.4. National Land Value Index

This entails the development of a price index for land to guide the assessment of land values in respect of compulsory acquisition of land and for connected purposes.

Location: Nationwide

Objective: To provide a framework for a credible valuation database for use in investments and land compensation decisions.

Implementing Agencies: MoLPP and NLC

Project Progress: Land Value Index was completed in 12 counties against a target of 14 counties. The under-achievement was due to budget cuts that affected stakeholders' validation.

3.4.5. Settlement of Landless

This entails regularisation of squatter schemes and purchase of farms through settlement fund trusts to settle squatters, displaced persons and forest evictees. This will guarantee the security of tenure, land rights and improved livelihood of landless households/squatters.

Location: Nationwide

Objective: To guarantee security of tenure, land rights and improved livelihood of squatters.

Implementing Agency: MoLPP

Project Progress: 6,456 landless households were settled against a target of 10,000.

Implementation Challenges

- Inadequate and late disbursement of funds affected the timely implementation of projects.
- Manual land records which hindered expeditious land transactions.
- High number of litigation cases resulting in pending bills.
- Insecurity from hostile communities.
- Inadequate capacity in land administration and management.

Lessons Learnt

- A multi-sectoral approach is critical for the implementation of projects and programmes.
- Strong political will is important in achieving land reforms.
- Digitisation of land transactions and processes has enhanced public access to information and ease of doing business hence is critical in improving access to services.
- Decentralisation of services and modernisation of land offices has contributed to improved access of land services and ease of doing business.

Recommendations

- Enhance funding by the National Treasury.
- Fast-track digitisation of all land records and processes.
- Promote use of Alternative Dispute Resolution (ADR) mechanisms for land dispute.
- Enhance public participation among communities.
- Timely approval for employment of adequate human capacity to improve service delivery.

3.4.6. Development of Natural Resources Inventory and Database

The programme involves mapping and development of an inventory of natural resources culminating in an atlas of the country's natural capital. Further, an interactive theme-based geo-portal was to be developed to aid in updating the database.

Location: Nationwide

Objective: The objective is to provide coherent, systematic, up to date and reliable information on the country's natural resources.

Implementing Agency: NLC

Project Progress: The Commission has inventoried natural resources in the country, culminating in a draft ATLAS of the country's natural capital. In addition, the sector has also developed a geo-portal of natural resources as well as various natural resource specific databases for the country. The creation of these inventories currently stands at 80 percent as at close of FY 2021/22 and it is expected to be completed in the FY 2023/24 in line with NLC's Strategic Plan. The Commission has equally created 16 theme-based natural resources registers, databases and inventories.

Implementation Challenges

- Slow pace of digitisation of land records and uptake of technology.
- Inadequate funding limiting identification, mapping and updating the natural resource inventory.

Lesson Learnt

- Effective communication, consultation, collaboration and cooperation both internally and externally are key to the successful implementation of programmes.

Recommendation

- Explore resource mobilisation both from the exchequer and outside the Government's domain to address budgetary needs.

3.4.7. Addressing Historical Land Injustices

This involves investigation of current or Historical Land Injustices (HLI) and making recommendations for appropriate reparation as per Article 67(2)(e) of the Constitution.

Location: Nationwide

Objective: To ensure that all historical land conflicts and injustices are appropriately addressed.

Implementing Agency: NLC

Project Progress: During the period under review, the sector received 1.300 HLI claims of which 721 were admitted out of which 500 were instigated and recommendations on appropriate redress made pursuant to article 67(3) of the Constitution.

Implementation Challenges

- Low budgetary allocation due to budgetary cuts and austerity measures.
- Inadequate human capital and expertise.

Lesson Learnt

The involvement and support of the Government and other stakeholders are critical to the redress of historical land injustices.

Recommendations

- Explore resource mobilisation both from the Government and other parties to address budgetary needs.

- Review HLI deadline provided by the law to September 2026 to give ample time for the completion of the lodged cases.

3.4.8. Compulsory Land Acquisition

Compulsory land acquisition is based on Article 40(3) of the Constitution, which empowers the Government to acquire property for public use or in public interest in exchange of fast and full payment of just compensation. Under section 107(1) of the Land Act, 2012, NLC is mandated to acquire such land on behalf of the National or County Government and to implement the acquisition in line with the Constitution and applicable laws. This includes the Community Land Act, 2016 which also provides for compulsory acquisition of community land. The applicable procedure for land acquisition is derived from the Land Act, Land Value Amendment Act, 2019, Land (Assessment of Just Compensation) rules, 2017 among other laws.

Location: Nationwide

Objective: To facilitate access of land for public projects

Implementing Agencies: NLC, MoLPP, and acquiring bodies.

Project Progress: 15 land acquisition projects have been processed for key Government projects in various sectors such as transport, water and sanitation, energy and security.

Implementation Challenges

- Inadequate and late disbursement of funds affected timely implementation of projects.
- Manual land records which affected expeditious land transactions.
- High number of litigation cases resulting in pending bills.
- Insecurity along the Kenya-Somalia border and Kenya-Ethiopia border as well as from hostile communities possess a threat to surveying work.
- Inadequate capacity in land administration and management.

Lessons Learnt

- Multi-sectoral approach is critical for implementation of projects and programmes.
- Digitisation of land transactions and processes has enhanced public access to information and ease of doing business hence is critical in improving access to services.
- Decentralisation of services and modernisation of land offices has contributed to improved access of land services and ease of doing business.

Recommendations

- Enhance funding remittance by the acquiring entities.
- Fast-track digitalisation of all land records and processes.
- Promote use of ADR mechanisms including traditional dispute resolution in land disputes.
- Integrate participation of stakeholders, including local communities in land acquisition.
- Enhance human capacity to improve service delivery.

3.5. PUBLIC SECTOR REFORMS

"A Citizen-Focused and Results-Oriented Public Service"

This sector supports national transformation by increasing access to public services; development of skills and competencies in the public service; formulation and monitoring the implementation of Human Resources Management policies; improving employee wellness in the public service; aligning organisational structures with mandate and core functions; enhancing business process re-engineering and development and its application in service delivery; promoting knowledge management and information sharing; and institutionalising appropriate career design and development strategies in the public service. During the period under review, the public sector implemented various programmes and projects towards the realisation of its key objectives as shown in the table below.

Table 3.9: Public Sector Reforms Achievement for FY 2021/22

MTP III Outcome	Outcome Indicator	Achievement FY 2020/21	Target FY 2021/2	Achievement FY 2021/22	Remarks
Improved service delivery	Proportion of officers who are women in the civil service (percent)	21.3	30	24.30	The decline is attributed to women officers in the civil service who retired
	Proportion of civil servants in Job Group P (CSG7) and above who are women (percent)	25.6	30	30.54	Implementation of the affirmative action programme led to the over-achievement.
	Proportion of public institutions complying with public service values and principles of governance (percent)	40	50	41.7	This means that while the public service is rendering services to the citizens in various quarters, there is non-observance of the national values and principles of governance in Article 10 and principles of the public service in Article 232. However, there is an improvement of compliance of 1.7 percent from the previous year

Source: Evaluation Report on the Status of Compliance of the Public Service FY 2021/22 and Integrated Payroll and Personnel Database

The sector implemented the affirmative action programme which led to over-achievement of 0.54 percentage points to the proportion of civil servants in Job Group P (CSG7) and above who are women as per the requirements of Article 27(6) and (8) of the Constitution.

3.5.1. Integrated Service Delivery Model (One-Stop-Shops)

The programme focuses on improving the accessibility of public service delivery by establishing and implementing one-stop-shop physical and online platforms, namely: Huduma Centres; Huduma Portal; Huduma Mobile Application; E-Citizen; and Huduma Contact Centre.

Location: Nationwide

Objective: To transform public service delivery by the provision of efficient, effective, accessible, and citizen-centric services through one-stop-shop platforms.

Implementing Agency: Huduma Kenya Secretariat

Project Progress: 12.01 million customers were served through the Huduma Service Delivery platforms across the 52 Huduma Centres, Huduma Mashinani outreaches and Huduma Contact Centre. Eleven new services were introduced in Huduma Service Delivery Channels; thirteen MCDAs services were re-engineered; MCDAs with services deployed in Huduma Centres increased from 66 to 76; innovative Business Process Outsourcing models where Huduma Kenya offer services on behalf of MDAs; enhanced citizen to Government interactions by promoting high service delivery standards thereby attaining a customer satisfaction level of ninety 95 percent and trained 1500 staff from MDAs on Huduma customer service excellence standards.

Implementation Challenges

- Inadequate or delayed funding for most activities which undermined optimal service delivery thereby impacting on execution of the mandate and completion of projects. Some of the delayed projects included the expansion of Huduma Centre services to sub-counties.
- Delays and inadequate release of exchequer resulting in accumulation of unfunded commitments and increasing pending bills.
- Ageing ICT infrastructure, systems and licences resulting in continuous disruption of service delivery to citizens.
- Insufficient policy, legal and institutional framework for Huduma Kenya Programme.

Lessons Learnt

- Political goodwill and top leadership support at the National and County levels of government plays a crucial role in instituting the widespread change management of deploying the Huduma Kenya Service Delivery Programme at a large scale.
- Stakeholders' engagement is key to successful service delivery e.g. service leaders meeting held quarterly has been crucial for the whole-of-government approach to delivery of services through Huduma Kenya.
- There is a need for adoption of information and communication technology tools to support timely service delivery, virtual learning, and remote working.
- Adherence to performance contract enhances continual improvement of services offered under Huduma Service Delivery channels.
- Physical Huduma Centres as a one-stop platform remain crucial in offering Government services to customers.
- Continued innovation is a necessity especially in this era of disruptions.
- The mutating cyber threats targeting Government Information Systems and data are a threat to national security.

Recommendations

- Provide necessary legal, policy and institutional framework for Huduma Kenya Programme.
- Provide adequate funding and enhance counterpart funding for sustainability and continued implementation of the programme.
- Develop policy and guidelines on flexible working arrangements governing equipment use, network security and performance expectations. This will increase staff capacity in modern ICT and virtual learning to meet customer expectations in service delivery.
- Set up information security management systems to safeguard documentation and information.

3.5.2. Capacity Assessment and Rationalisation of the Public Service

The Programme focuses on the unification of public service human resource information management, payroll number generating system, government payroll management policy, and development of public service strategies, norms and standards.

Location: Nationwide

Objective: To integrate public service human resource management across National and County Governments.

Implementing Agency: State Department for Public Service.

Project Progress: The automated human resource system was updated; unified human resource system was developed; Upgrade of the GHRIS infrastructure to include additional three prototype modules (Establishment Control, Training and Development & Third-Party Deduction Management) were initiated.

Implementation Challenges

- Obsolete GHRIS infrastructure and systems are slowing down the implementation of the system.
- Inadequate skills and competencies at national and county governments.
- Poor implementation of public service policies, strategies, standards and norms.

Recommendations

- Upgrade GHRIS infrastructure to cover additional services and enhance public service human resource information data security.
- Provide adequate funds for the human resources development in the public services at both levels of government.
- Implement human resources management policies, strategies, standards and norms.

3.5.3. Kenya School of Government

The school builds the capacity of public service by developing core, managerial and leadership competencies for quality public service through training, research and consultancies.

Location: Kenya School of Government (KSG), Lower Kabete and satellite campuses

Objective: To enhance public service delivery by building competences and inculcating values and ethics necessary for the transformation of the public service.

Implementing Agency: KSG

Project Progress: In the review period, the school trained and certified 41 technical officers in green growth and circular economy, developed and rolled out programmes for Kenya's public service and the Federal Republic of Somalia; undertook research activities to assess implementation of the Big Four Agenda; conducted consultancies for various other organisations; operationalised the Margaret Kenyatta Institute for Social Development; undertook development projects for the various campuses and strengthened its capacity. The school has continued to strengthen its consultancy services and training of board members of MDAs and County Governments. It has also facilitated MDAs to develop and review job descriptions, strategic plans and recruitment of staff. KSG completion rate of projects as of June 2022 was assessed as follows: 23 percent for the 112-bed capacity hostel single rooms at the KSG Embu Campus; 13 percent for the tuition complex at Matuga Campus; 22 percent for the tuition complex at Baringo Campus; and 5 percent for Vihiga

E-Learning Centre. Ultra-modern facility at Mombasa Campus was completed and a Youth Empowerment and Innovation Centre established at Isiolo.

Implementation Challenges

- Delayed release of budgetary allocations.
- Change in Government policy in terms of capacity development which affected training and related budgetary projections.
- Suspension of training programmes occasioned by COVID-19 lock down and revised priorities due to scarce resources.
- Competition by other commercial human capacity building institutions hence the need to continually refine business development and quality assurance strategies.

Lessons Learnt

- Leverage technology in doing business enhances efficiency and effectiveness.
- Prioritisation and hedging funding for the projects geared towards upgrading the physical infrastructure is crucial in accommodating emerging needs.

Recommendations

- Timely release of budgetary allocations.
- Re-engineer business model and leverage on partnerships and collaborations.
- Leverage technology using enhanced learning management system.
- Establish a legal framework to establish and govern the one-stop-shop service delivery model to ensure the enforcement of service delivery standards across the Huduma service delivery channels.
- Increase funding to ensure prompt corrective and preventive maintenance to enhance safety and security.
- Redistribute the existing staff within the civil service to enhance service delivery.

A section of the completed ultra-modern facility at

3.6. LABOUR AND EMPLOYMENT

"Provide Every Kenyan with Decent and Gainful Employment"

The Labour and Employment Sector is an enabler of socio-economic transformation. It plays a key role towards realisation of the aspirations of the Kenya Vision 2030 by providing an adaptive human resource base that meets the requirements of a rapidly industrialising economy. The sector focuses on the creation of jobs, improvement of productivity and promotion of a conducive working environment for Kenyans.

The sector implemented various programmes and projects during the FY 2021/22. The achievement of key MTP III outcome targets, flagship projects and other programmes and projects are presented in this section.

Table 3.10: Labour and Employment Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Enhanced labour productivity	Jobs created	(737,500)	1,450,000	924,900	This is the total number of jobs created in 2021 (Economic Survey, 2022). The shortfall in performance is attributed to the job losses experienced because of the effects of COVID-19 containment measures.
	Country Labour Productivity Index	1.47	3.3	1.5	The shortfall in labour productivity is attributable to the reduced outputs during the COVID-19 pandemic period.
	Country Competitiveness Index (Out of 7)	-	4.3	-	The WEF did not rank countries' performance in 2020 and 2021 to give them time to recover from the effects of COVID-19 pandemic.
Increased employability of the youth	Hard to serve youth provided with core life and business skills	13,412	45,000	7,842	Restructuring of the KYEOP resulted to transferring of job specific skills training to the Ministry of ICT, Innovation and Youth Affairs
	Unemployment rates (percent)	12.3	5	6.6	
	Proportion of hard to serve youth employed after core life and business skills training	59.7	90	-	

Source: State Department for Labour Annual Progress Report, FY 2021/22

The unemployment rate declined from 12.3 percent in FY 2020/21 to 6.6 percent in FY 2021/22 even though the planned target (5 percent) was not achieved. This decline was attributed to re-opening of enterprises and the economy following relaxation of COVID-19 containment measures.

3.6.1. Labour Market Information System

The project involves development of data management policy and modules for facilitating information exchange between the EAC Partner States, migrant workers and Kenyans in the Diaspora.

Location: Nationwide

Objective: To improve collection, analysis, storage, retrieval and dissemination of labour market information.

Implementing Agency: Ministry of Labour and Social Protection.

Project Progress: A total of 420,232 people visited the system during FY 2021/22 compared to 247,117 people in the FY 2020/21 representing a 70 percent increase. Job Opportunity Analysis (JOA) was carried out and quarterly reports prepared to provide insights into the number of vacancies, skill requirements and location of jobs in different sectors. In addition, five out of the 47 counties proceeded with the enterprise-based pilot survey with the aim of establishing the skills and occupations processed by employers and workers in the formal sector.

3.6.2. Strengthening Linkages between the Industry and Training Institutions

Location: Nationwide

Objective: To strengthen the industrial attachment framework and bridge the skills gap in the country.

Implementing Agency: Ministry of Labour and Social Protection.

Project Progress: The National Industrial Training Authority (NITA) accredited and registered 873 training institutions to facilitate provision of industrial training; placed 27,567 students and five lecturers on industrial attachment to enable them gain hands-on experience in their areas of training; trained 52,659 persons working in the industry in various industrial skills to bring them at per with the changes in the industry; engaged 40 persons in apprenticeship training and 3662 indentured learners; and assessed the competences of 153,291 candidates in various trades through the Government trade test system thereby contributing to decent employment.

Implementation Challenges

- Outdated training equipment and infrastructure at industrial training centres.
- Skills mismatch between industry requirements and academia output.
- Weak collaboration between training institutions on labour market information.
- Lack of a robust digital training platform to complement physical or in person training.
- Inadequate budgetary allocation.

Lesson Learnt

- Leveraging ICT such as digitised curricula enhance delivery of training.

Recommendations

- Enhance digital environment and capacity to support the delivery of an inclusive industrial training curriculum.
- Develop digital industrial training manuals.

3.6.3. National Internship Programme

Entails development and implementation of the national internship policy and national internship programme.

Location: Nationwide

Objective: To facilitate placement of graduates in internships.

Implementing Agency: Ministry of Labour and Social Protection.

Project Progress: The Draft National Internship Policy and Guidelines were finalised and forwarded to the National Treasury where comments were received and incorporated, and the Draft is awaiting discussion by the National Development Implementation Technical Committee before forwarding it to Cabinet for approval. In FY 2021/22, no activity was undertaken towards finalisation of the Policy and Guidelines.

3.6.4. Research and Training in Occupational Safety and Health

Location: Nationwide

Objective: To construct and equip the National Occupational Safety and Health Institute.

Implementing Agency: Ministry of Labour and Social Protection.

Project Progress: The sector established an Occupational Safety and Health Institute, and progressed construction works of the Institute to 75.36 percent at the end of the period under review. Further, the Institute trained 13,473 workers on Occupational Safety and Health (OSH) through the OSH workplace committees; sensitised 43 health care workers in Kisumu and Kericho Level 5 hospitals towards mainstreaming Basic Occupational Health Services in universal health care; carried out 18,549 examinations of hazardous industrial plants and equipment. In addition, 135,059 medical examinations of workers in hazardous occupations were conducted for early detection and effective mitigation of hazardous conditions; and investigated 57 reported fatal occupational accidents.

3.6.5. Establishment of Alternative Dispute Resolution Mechanism

Location: Nationwide

Objective: To provide conciliation and mediation services for labour and employment disputes through an institutional mechanism as provided under Article 159(2)(c) of the Constitution.

Implementing Agency: Ministry of Labour and Social Protection.

Project Progress: An ADR mechanism for labour and employment disputes was established as provided for under Article 159(2)(c) of the Constitution and Labour Relations Act, 2007 to ensure expeditious conciliation and mediation services for disputes outside the existing arbitration through the Employment and Labour Relations Courts.

3.6.6. Policy, Legal and Institutional Reforms

The following were the achievements:

- Draft Guidelines for implementation of the National Internship Policy were finalised.
- The National Wages and Remuneration Policy was finalised and submitted to the National Labour Board for review and approval.
- The development of the National Labour Migration Policy was finalised and submitted to Cabinet for approval.
- Drafting of the Labour Migration Management Bill was finalised and forwarded to the Office of the Attorney General.

- The Decent Work Country Programme for Kenya 2021-2024 was developed.
- Reviewed the Labour Relation Act 2007, Labour Institutions Act 2007 and Employment Act 2007 to align them to the Constitution and emerging issues and challenges.
- Review, establishment and operationalisation of Wages Councils in various sectors.
- Operationalisation of the National Employment Authority has commenced.

Implementation Challenges

- Frequent budget cuts delayed the completion of key projects such as the National Occupational Safety and Health Institute.
- Obsolete training equipment and dilapidated Industrial Training Centres.
- Lack of a framework and weak collaboration between institutions in sharing the requisite labour market information.
- Frequent changes in technology and customer needs prompting continuous training for workers and review of curricula.
- Lack of a formalised qualification framework for practitioners in MSMEs.
- Lack of appropriate legislation on labour migration.
- Inadequate awareness and weak productivity culture within the populace.
- Engagement of multiple contractors on different phases in the implementation of single projects exceeding one-year precipitates delays in completion of the projects, thereby increasing the initial cost estimates. The multiple contractors also bring forth liability issues in cases where the project is deemed faulty.
- Multi-agency approach in regulation and monitoring the operations of Private Employment Agency is key in routing out unscrupulous recruitment agencies.
- Technology has simplified business process operations in creating awareness on labour laws and social protection services and in the collection, analysis and dissemination of information on the labour market and social protection interventions.
- The dual nature of ICT as a job seeking tool and a jobs creator can be exploited further to promote innovative job search and matching technologies which create employment opportunities.

Recommendations

- Allocate sufficient funds to complete key projects in the sector.

i. Fast-track the approval and enactment of policies and bills by the cabinet and parliament respectively to facilitate realisation of the sector's goals.

ii. Develop a strategy for enhanced collaboration between the industry and training and research institutions to ensure that skills demand by the industry is aligned to skills supply by the training institutions.

iii. Developing a framework for collaboration and sensitisation of all stakeholders involved in generation of labour market information in the country is critical to ensure their full participation in the collection, analysis, presentation and dissemination of timely and adequate labour market information.

iv. Fast-track the review of training standards for the Industrial Training Centres to ensure provision of relevant industrial skills as per the needs of the industry.

v. Increase awareness of productivity improvement initiatives in all sectors of the economy.

vi. Assess and certify skills in various trade areas.

3.7. NATIONAL VALUES AND ETHICS

"A Value-Driven, Ethical, Peaceful, United and Prosperous Nation"

The sector aims to ensure national values and ethics become the central rallying ingredient and theme in the planning and execution of national programmes. This is meant to create a national culture of ethics and values; and promote efficiency and effectiveness in implementation of programmes and projects. This will ultimately facilitate adoption of a positive national culture, enhance political and social stability and promote equitable distribution of resources and opportunities leading to timely attainment of Vision 2030.

In the MTP III period, greater emphasis was placed on enforcement of policies, laws and institutional reforms to instil national values and ethics. The national leadership has continued to play a leading role in widespread public mobilisation and education, and enforcement of relevant policies and legislation.

3.7.1. Enforcement of Policy, Legal and Institutional Reforms

This programme entails reviewing and putting into effect policy, legal and institutional frameworks for the realisation of national values and ethics.

Location: Nationwide.

Project objective: To empower institutions to effectively discharge their mandates.

Implementing Agencies: Executive Office of the President**,** Directorate of National Cohesion and Values, Public Service Commission, Ethics and Anti-Corruption Commission, Kenya National Commission on Human Rights, National Gender and Equality Commission, Parliament, Judicial Service Commission, and Office of the Attorney General and Department of Justice.

Project Progress: Some of the policies and legal reforms undertaken to support realisation of national values and ethics during the reporting period included development of the:

i. Development and *gazettement of* Bribery Act guidelines to assist public and private entities to develop procedures for prevention of bribery and corruption under Section 12(1) of the Bribery Act of 2016.

On the enforcement of policy and legal frameworks on national values and ethics

i. The Directorate of National Cohesion and Values monitored mainstreaming and reporting on national values and principles of governance among 429 MDAs against a target of 250 translating to 180.4 percent achievement of the planned target.

ii. The Office of the President conferred national honours and awards on 622 heroes and heroines from across the Republic for exemplary conduct and service to the nation.

iii. In the enforcement of legal provisions on ethics and integrity, EACC conducted a number of activities that are discussed in the Political Pillar-The Rule of Law and Governance section of this report.

iv. To promote standards and best practices in ethics and integrity, EACC received and processed 5,010 integrity verification requests from recruiting agencies and 108,679 self-declaration forms from individuals seeking appointment to the public service in line with Section 12A of the Leadership and Integrity Act, 2012. The Commission also approved four leadership and integrity codes for state officers and reviewed codes of conduct and ethics for five public entities to ensure compliance with Chapter Six of the Constitution and the Leadership and Integrity Act. Further, the Commission processed applications from 262 public officers to open and operate bank accounts outside Kenya as required under Section 19 of the Leadership and Integrity Act.

v. Judicial Service Commission (JSC) received and processed 103 complaints and petitions against judges. A total of 87 complaints were concluded while 16 were pending at the end of the reporting period. Further, JSC received six cases against judicial officers and judicial staff in JSG 3 and above in addition to 14 pending matters from the previous period.

vi. To enhance integrity, the Office of the Attorney General and Department of Justice through the Assets Recovery Agency instituted investigations on KSh.3.3billion worth of proceeds of crime, preserved assets under forfeiture proceedings worth KSh.1 billion and seized assets worth KSh.192 million. The Office received and handled 990 complaints against advocates from the public.

Implementation Challenges

- Gaps in the integrity and anti-corruption statutes are a major obstacle to their effective implementation.
- Lenient penalties as prescribed by the law do not adequately deter the practices of corruption.
- Slow pace in the development, review and approval of policies and bills by Cabinet and Parliament.
- Budgetary cuts affected implementation of planned activities and the achievement of set goals.
- The emergence of the COVID-19 pandemic undermined implementation of planned programmes.

Lessons Learnt

- Effective discharge of the sector programmes is critical in the realisation of a responsive and impactful public service.
- Successful implementation of sector programmes and projects depends on the level of awareness of national values and ethics.
- Continued loading of national values in the performance contract of MDAs is critical in the realisation of national values and ethics in the public sector.
- Availability of adequate resources is key to successful implementation of planned programmes and activities.

Recommendations

- Review and propose amendments to legal and regulatory framework in the fight against corruption and unethical conduct.
- Accelerate the development, approval and implementation of the various policies, legal and institutional reforms key to the achievement of the projects and programmes.
- Increase funding to facilitate implementation of programmes that promote mainstreaming of national values and ethics in the wider public service and the Kenyan citizenry.

- Embrace public private partnership strategy in the mobilisation of additional resources for the implementation of programmes to realise national values and ethics.

3.8. ENDING DROUGHT EMERGENCIES

"Planning for Drought: An End to Drought Emergencies and Food Insecurity in Kenya"

Global warming and climate change negatively affect the pattern, quantity and frequency of rainfall. Decreased amounts of rain result in long spells of drought in Arid and Semi-Arid Lands (ASAL) of the country adversely affect crop farming and livestock production. Typically, heavy floods tend to follow drought episodes. These harsh conditions can be substantially mitigated if adequate and appropriate measures are taken in advance. Ending Drought Emergencies (EDE) was recognised as one of the key foundations for national development. To enhance food and nutrition security under the "Big Four" Agenda, the sector has implemented programmes and projects to address the twin challenges in the reporting period as summarised in the table 3.11 below:

Table 3.11: EDE Sector Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Reduced risks to communities and livelihoods resulting from drought	Number of human deaths attributed to drought per 100,000 population	0	0	0	This was attributed to investment in drought early warning systems, resilience building, contingency planning, and response both by the National and County Governments.
	Proportion of livestock population lost (dying) during drought	0	12 percent	10.4 percent	Losses minimised due to implementation of integrated EDE strategies.

Source: National Drought Management Authority

During the reporting period, Kenya was facing one of the worst droughts in four decades. However, the livestock losses recorded (10.4 percent) were lower than projected 12 percent due to formulation and implementation of integrated EDE strategies in the ASAL counties. The key interventions included improved drought early warning system; increased investment in resilience building, more so water, education, health, diversification of livelihoods and availability of social protection programmes, including cash transfers. In addition, there were improved response interventions by the National Government, County Governments and Development Partners.

3.8.1. National Integrated Drought Early Warning Systems

This project supported collection, analysis, synchronisation, and dissemination of drought early warning information for ASAL counties.

Location: ASAL Counties

Objective: To provide reliable and timely drought and food security information to communities, government, and non-governmental actors for appropriate and timely response.

Implementing Agencies: National Drought Management Authority (NDMA), World Food Programme, Food and Agriculture Organization, Sector Ministries, and County Governments.

Project Progress: During the period under review, NDMA automated data collection on livestock body condition and trained 54 officers on development and use of Pictorial Evaluation Tool (PET); partnered with Food and Agriculture Organization in funding the adoption of PET and piloting the tool in six counties namely Kitui, Marsabit, Garissa, Kwale, Laikipia and West Pokot; trained 18 officers on use of the Earth Observation Data Centre; introduced application of alternative data collection strategies for production indicators; used family mid-upper arm circumference data approach to sustain surveillance of acute malnutrition in 23 ASAL counties through the review period; produced and disseminated 276 monthly county drought early warning bulletins to inform preparedness and response by various stakeholders; reviewed the county livelihood profile data culminating in production of livelihood zone maps across 23 ASAL counties; developed early warning system indicator trigger thresholds for Mandela, Marsabit, Tana River, Turkana, Wajir, Garissa, Baringo, Kilifi, Isiolo, Samburu and West Pokot counties. The Authority also coordinated multi-sectoral and multi-stakeholder seasonal drought and food security assessments in 23 drought affected counties to inform drought preparedness and response.

Implementation Challenge

- There was limited funding that necessitated sourcing more funds from various development partners to fill the funding gap.

Lessons Learnt

- Active participation of stakeholders at all stages of production of drought early warning products is important in ensuring success of early warning – early action systems.
- Through the participatory model, several partners stepped in during the reporting period to support the drought and food security assessments as well as the subsequent implementation of the response plans.

Recommendation

- Drought early warning is a priority programme that should be fully funded by the Government. There is, therefore, a need for more funding to reduce the funding gap.

3.8.2. Hunger Safety Net Programme (HSNP)

Through this project, it is expected that beneficiaries will not be adversely affected during drought as they will have some money to purchase foodstuffs and cater for other necessities, including access to health services. HSNP is one of the components of the Kenya Social and Economic Inclusion Programme, jointly implemented with the State Department for Social Protection with support from the World Bank. Unlike other social protection programmes, it focusses on poverty levels and has a scalability component.

Location: Turkana, Marsabit, Mandera, Wajir, Samburu, Isiolo, Garissa and Tana River.

Objective: To provide social protection and cushion 133,8000 poor households in the eight arid counties and based on agreed trigger levels, scale up to 675,553 additional households who may be affected by calamities such as drought. The programme aims to deliver regular and emergency cash transfers and influence the development of an integrated social protection mechanism both at the national and county levels.

Implementing Agency: NDMA

Project Progress: During the period under review, NDMA completed the re-registration, retargeting and account opening in the pioneer counties of Turkana, Mandera and Marsabit. The exercise was also initiated in four other counties, namely Samburu, Isiolo, Garissa and Tana River. A total of 32,000 most vulnerable households will be onboard as regular beneficiaries. Some of the specific achievements are as follows:

Registration and Targeting of Households: Registration and targeting of beneficiaries in the four expansion arid counties of Samburu, Garissa, Tana River and Isiolo were completed during the reporting period. As a result, 264,567 households were registered out of which 32,000 beneficiaries have been targeted in a participatory process to benefit from regular cash transfers (see Table 3.12). This now paves the way for accounts opening and provision of cash transfers in these counties.

Table 3.12: Registration and Targeting of Beneficiaries in HSNP

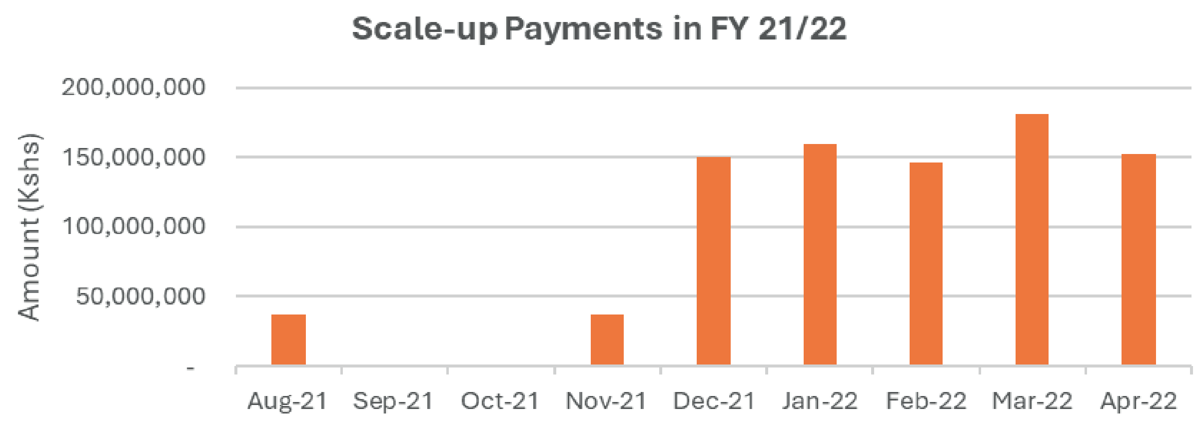
County	HHs Registered	2019 Census Data	Percent Reached	Regular Beneficiary Quotas
Garissa	87,052	141,394	62 percent	9,252
Isiolo	50,378	58,072	87 percent	7,027
Samburu	61,535	65,910	93 percent	8,344
Tana River	65,602	68,272	96 percent	7,377
Total	264,567	333,618	79 percent	32,000

Regular cash transfer: A total of KSh. 3.2 billion was delivered to beneficiary households in Turkana, Mandera, Wajir and Marsabit as summarised below:

Figure 3-1: Regular Cash Transfer Payments in FY 2021/22

condition index thresholds in four counties namely Wajir, Mandera, Turkana and Marsabit with each household receiving KSh. 2,700 per month through the Hunger Safety Net Programme. The scale up payments are summarised below:

Figure 3-2: Scale-up Payments in FY 2021/22



	Aug-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
Amount (Kshs)	36,598,500	36,598,500	150,411,600	159,264,900	146,118,600	181,086,300	152,207,100

Lesson Learnt

- Cash transfer scale-up is a good model that is being adopted by various partners as a cost effective and efficient way of responding to emergencies as opposed to provision of food aid. It also has less logistical challenges and supports the local markets.

Recommendation

- More MDAs and partners should adopt the cash transfer model as an efficient way of responding to emergencies.

3.8.3. National Drought Emergency Fund (NDEF)

This project seeks to support the establishment and operationalisation of a multi-donor fund to cater for drought preparedness, resilience, response and recovery. The Fund has been established through the PFM Act, 2012 through the Public Finance Management (National Drought Emergency Fund) Regulations, 2021. The Regulations specify that out of all the resources capitalised into the Fund, 50 percent will support drought resilience and preparedness interventions; 40 percent are for drought response; 5 percent are to support drought recovery interventions; and 3 percent are to support administrative costs of the Fund.

Location: Nationwide

Objective: To improve the welfare and resiliencies of the beneficiaries through protection of livelihoods and multi-sectoral drought emergency interventions. The Fund aims at linking drought early warning to early action that will ensure adequate preparedness and mitigation for drought before the emergency stage is reached. It will support strategic resilience building innovations, drought preparedness projects, response, and recovery to mitigate any effects of drought. During emergencies, it will support cash transfers to the vulnerable to meet their basic needs and ensure critical socio-economic facilities like schools, hospitals and boreholes continue to function.

Implementing Agency: NDMA

Project Progress: During the review period, the National Drought Emergency Fund was established. Following this development, the National Drought Emergency Fund, 2022 Guidelines were developed and approved by Parliament. Subsequently, the National Treasury, through the Supplementary Estimates, allocated an initial KSh. 200 million to NDEF in the FY 2021/22.

Implementation Challenge

- The long process of formulating Regulations and enactment by Parliament led to delay in operationalisation of the Fund.

Recommendation

- Fast-track and accelerate implementation of the project and ensure it is adequately capitalised by both the Government and development partners.

3.8.4. Integrated Knowledge Management System for Drought

The project entails the establishment and implementation of an integrated knowledge management system for drought.

Location: Nationwide

Objective: To ensure centralised management of drought risk management related information for ease of access. The project involves, among others, development of the knowledge and information sharing platform - an online central repository for drought related information or knowledge products. The modules of the platform or central repository include:

- Resource centre in which research products, policy and planning documents, reports, bulletins, among others are stored.
- Investment tracker - that captures who is doing what, where and with what resources within the ASALs.
- Planning and reporting module that facilitates online and real time reporting on progress by various implementers.

Implementing Agency: NDMA

Project Progress: The Authority finalised the development of the platform. The platform has an interactive forum in which stakeholders discuss topical issues. As part of continuous improvement, the Authority introduced into the system, the planning, monitoring and evaluation module that will facilitate online and real time reporting by various implementers. The Authority sensitised the board members and trained 102 officers on use of the system, 30 of whom were knowledge management champions.

Implementation Challenge

- No serious challenges were recorded during the reporting period.

Recommendations

- Fast-track the operationalisation of the knowledge management and information system platform.
- Sensitise stakeholders on the availability of the system and the type of data they may access.

3.9. SECURITY, PEACE BUILDING AND CONFLICT RESOLUTION

"A Nation of Peace and Stability: A Society Free from Danger and Fear"

National security is the protection against internal and external threats to Kenya's territorial integrity and sovereignty, its people, their rights, freedoms, property, peace, stability and prosperity, and other national interests.

The sector as an enabler aims at guaranteeing every person in Kenya freedom from danger (protection from physical or direct violence), and freedom from fear (a sense of safety, peace, and overall well-being). The economic growth and development anticipated in the Kenya Vision 2030 can only be achieved and sustained in a peaceful, stable, and secure environment. National security and protection of persons and property, peace building, cohesion and conflict resolution are cross-cutting themes of Kenya Vision 2030 and will continue to be of paramount importance to the Government of Kenya. The sector is a key incentive for attracting investment as it provides an enabling environment for economic growth and development. It is crucial for sustainable development and achievement of the Kenya Vision 2030 goals. It supports the "Big Four" initiatives by facilitating a secure 24-hour economy, provision of credible vital population statistics.

Various projects and programmes were implemented towards creating an enabling environment for economic development in the country.

Table 3.13: Security, Peace Building and Conflict Resolution Achievements for FY 2021/22

MTP III Outcome	Outcome Indicator(s)	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Enhanced security in the country	Police: population ratio	1: 470	1:403	1: 457	
	Crime rate (percent)	4.3	5.10		
	Timeliness in crime scene response (hrs)	2	1	0.75	The target was surpassed due increased acquisition of assorted security vehicles
Enhanced citizen participation in security matters	Nyumba Kumi coverage (percent)	100	100	100	
	Participation of women in the county peace and security committees (percent)	32	33	33	
Improved immigration services	No of e-passports issued	221,070	250,000	389,798	
	No. of work permits issued	19,380	30,000	19,108	Target not achieved due to COVID-19 restrictions.
	No of e-visa issued	257,940	580,000	654,385	

MTP III Outcome	Outcome Indicator(s)	Achievement FY 2020/21	Target FY 2021/22	Achievement FY 2021/22	Remarks
Improved refugee management	No. of refugees registered	23,535	28,000	45,884	
	No. of refugees relocated	300	14,000	133	Target not achieved due to COVID-19 restrictions, reduced detention and arbitrary arrests of refugees and asylum seekers.
	No. of refugees voluntarily repatriated	1,256	13,000	1,935	Target not achieved due to ongoing conflicts in the countries of origin.
Improved management of correctional services	Percentage of offenders contained, supervised	100	100	100	
	Percentage of offenders rehabilitated and re-integrated to the community	100	100	100	

Source: State Department for Interior and Citizen Services and State Department for Correctional Services Annual Progress Reports for FY 2021/22

County and Sub-County Nyumba Kumi committees have been operationalised and are coordinating security at the respective levels. Further, the second-generation Kenya National Action Plan on the implementation of the United Nations Security Council Resolution 1325 (UNSCR 1325) was implemented ensuring that women participated in the county peace and security committees as well as engendering the peace processes. The sector also facilitated provision of vocational training to 4,796 inmates; offered formal education to 6,013 long serving inmates; supervised 92,085 offenders serving under probation, community service orders, and pardoners; and offered appropriate treatment and rehabilitation services to 27,180 offenders to facilitate effective resettlement and reintegration within the community.

3.9.1. Installation of Surveillance Cameras in Urban Areas

Location: Nairobi, Mombasa, Eldoret, Nakuru and Kisumu

Objective: To establish a national Closed-Circuit Television (CCTV) project in Nairobi, Mombasa, Kisumu, Eldoret and Nakuru (including establishment of a command control centre with an integrated security intelligence and surveillance system).

Implementing Agency: State Department for Interior and Citizen Services.

Project Progress: Installation of the IC3 and installation of Phase I of surveillance cameras in Nairobi, Mombasa Metropolis, Kisumu, Eldoret and Nakuru were completed and operationalised.

Implementation Challenges

- Sustainability of completed and operational projects significant funding.
- Sophisticated and changing forms of cybercrime.

Lessons Learnt

- Use of technology is key in combating crime.

- Collaboration between Government agencies enhance effectiveness, especially in programme implementation.
- Sustainable funding is critical to realisation of planned outputs.

3.9.2. Completion and Equipping Six Model Prison Facilities

Location: Mwingi, Nyamira, Kwale, Kaloleni, Rachuonyo and Vihiga

Objective: To provide modern facilities and services to the offenders.

Implementing Agency: Kenya Prisons Service.

Project Progress: No progress was made during the review period due to budget rationalisation during the COVID-19 pandemic.

3.9.3. Construction of 20,000 Police and 6,000 Prison Staff Houses and 37 New Prison Wards

Location: Nationwide

Implementing Agency: Kenya Prisons Service

Project Progress: No progress was made during the review period due to budget rationalisation during the COVID-19 pandemic.

3.9.4. Equipping the National Forensic Laboratory at the Directorate of Criminal Investigations along Kiambu Road

Location: Directorate of Criminal Investigations (DCI) Headquarters, Nairobi

Objective: To enhance accuracy and timeliness in production of forensic analysis reports will lead to faster and efficient prosecution of offenders.

Implementing Agency: NPS

Project Progress: 70 percent of the equipment required for full operationalisation of the national forensic laboratory was acquired and installed. The full operationalisation of the laboratory is expected to reduce timelines in resolving crimes and increase conviction rates.

Implementation Challenges

- Inadequate budgetary allocation.
- Pending bills.
- Inadequate training budget for forensic experts.

Lesson Learnt

- Building the capacity of DCI in forensic science is crucial in investigations.

Recommendations

- Increase allocation towards the Laboratory.
- Build the capacity of DCI in forensic science to cope with crime dynamics.

3.9.5. Police Modernisation

Location: Nationwide

Objective: To address among other things, the problem of capacity, professionalism and efficiency and effectiveness of NPS to maintain law and order, guarantee security of Kenyans' lives and property.

Implementing Agency: NPS

Project Progress: 29 percent done based on the KSh. 41.4 billion cumulative expenditures since July 2013 out of KSh.143 billion total project cost.

Implementation Challenges

- Low funding coupled with budget cuts over the years.
- Rapidly changing technologies.
- Lack of equipment maintenance contracts.

Lessons Learnt

- There is a need to allocate adequate resources to realise significant progress in police modernisation.
- Need to review projects' components.

Recommendations

- Bring back all aspects of modernisation of police equipment under NPS, including the airwing and police boats.
- Source for adequate funding for all identified components.
- Ensure tested/reliable country(s) of origin and include maintenance contracts as part of equipment acquisition.

3.9.6. Acquisition of an Integrated Case Management System

Location: Nationwide

Objective: To fully integrate end to end case investigative crime case management system beginning at the police stations with the Occurrence Book right through to prosecution and inter-linking with other players including ODPP and the Judiciary.

Implementing Agency: NPS

Project Progress: Project did not progress due to lack of funding.

Implementation Challenge

- Crime dynamism and non-funding of the project.

Lessons Learnt

- Technology plays an important role in the fight against crime and in the investigation processes due to the evolving nature of crime.
- Collaboration among the services enhances effectiveness in implementation of projects and programmes.

Recommendation

- Redefine policing processes to have key processes automated to increase efficiency and effectiveness in the service delivery.

3.9.7. Completion of Integrated Population Registration System

Location: Nairobi

Objective: To ensure continuity in elimination of double registration, elimination of fraud and manipulation of records, and embrace efficiency and effectiveness in the issuance of national identity cards.

Implementing Agency: IPRS Directorate.

Project Progress: IPRS was completed and operationalised with more than 300 agencies connected. During the year under review, 22 agencies were connected to the population registration database and five agencies were connected to IPRS.

Implementation Challenges

- Slow implementation during the review period due to budget rationalisation occasioned by COVID-19.
- Inadequate funding leads to minimal project's milestones and prolonged implementation timelines.

Lessons Learnt

- Collaboration between government agencies enhances effectiveness, especially in programme implementation.
- Sustainable allocation of funds is critical to efficient service delivery.

Recommendations

- Conduct periodic stakeholders' engagement forums.
- Mobilise alternative funding sources including PPPs and donor support.

3.9.8. Kenya Defence Forces Modernisation

a) Kenya Defence Forces (KDF) – Food Processing Factory Phase 2 & 3

Location: Gilgil

Objective: The project will enhance national and regional security by building capacity and sustaining operations.

Implementing Agency: Ministry of Defence

Project Progress: Phase I (dried vegetables) was completed while Phase II & III is at the design and development stage, funded through the Export Credit Agency (ECA) at a cost of US$ 18 million.

b) Construction of 4000T Slipway for Kenya Navy

Location: Kenya Navy Fleet Mkunguni – Mombasa

Objective: As an industrial capacity project, the facility will be used for design and construction of ships, repair and refit.

Implementing Agency: Ministry of Defence

Project Progress: The project implemented through ECA was completed and commissioned in December 2021.

Implementation Challenge

- The COVID-19 pandemic slowed down the implementation of the slipway since most of the materials and equipment were mainly imported.

Lesson Learnt

- Collaboration between Government agencies enhance effectiveness and delivers better services hence the need for a whole-of-Government approach to enhance implementation of projects that cut across different MDAs.

c) Modernisation of Ammunition Production at Kenya Ordnance Factory

Location: Eldoret, Uasin Gishu County.

Objective: The project will enhance national and regional security by building capacity and sustaining operations.

Implementing Agency: Ministry of Defence.

Project Progress: The project is in the market survey stage and will be funded through the ECA facility.

3.9.9. Construction and Equipping of NPS Hospital in Nairobi

Location: Mbagathi, Nairobi

Objective: To provide comprehensive healthcare among NPS officers in Nairobi and its environs and for referral cases.

Implementing Agency: NPS

Project Progress: The project is 98 percent.

Implementation Challenges

- Limited involvement of NPS in implementation of the project

- Inadequate funds for the operationalisation of the hospital.

Recommendations

- Hand over the project to NPS.
- Allocate enough funds for operationalisation.
- Fund the last phase (staff houses, equipment and morgue).
- There is a need to fully involve NPS as the end user in future projects executed by other MCDAs in Government-to-Government arrangements.

3.9.10. Promoting Peaceful Co-existence among Ethnic Communities

Location: Nationwide

Objective: To promote peace, cohesion, mitigate, and resolve violent conflicts.

Implementing Agencies: National Cohesion and Integration Commission, and National Steering Committee on Peacebuilding on Conflict Management.

Project Progress: During the reporting period, the Commission enhanced its focus on conflict resolution, sensitisation, and capacity building, promoting early warning and early response mechanisms and rapid conflict analysis. In addition, the Commission promoted inclusivity in employment in public institutions through ethnic and diversity audits of state agencies. To address hate speech and ethnic contempt, the Commission continued to receive and process complaints and investigations.

The Commission conducted a national conflict hotspot mapping in 47 counties to establish conflict hotspot counties to inform targeted interventions. In addition, a rapid conflict analysis was conducted in 15 counties namely, Narok, Nakuru, Kisumu, Kakamega, Nandi, Trans-Nzoia, Uasin Gishu, Machakos, Mombasa, Kilifi, Kiambu, Nyeri, Nairobi, Laikipia and Kericho. The national conflict mapping identified 23 counties as hotspot counties and targeted interventions put in place to mitigate the conflicts. The Commission strengthened early warning and early response mechanisms by conducting Early Warning and Early Response (EWER) baseline mapping in six counties; Narok, Nandi, Kakamega, Mombasa, Nairobi and Nairobi to assess the current EWER mechanisms as well as strengthening the capacity of peace structures (Peace Committees, Nyumba Kumi, Chiefs and peace actors) in the six counties.

To enhance inter and intra-community dialogues, mediation and reconciliation, the Commission conducted community dialogue forums and mitigated conflicts in 22 counties namely, Nakuru, Narok, Nandi, Kisumu, Mombasa, Mandera, Baringo, Samburu, Marsabit, Nairobi, Laikipia, Nandi, Kericho, Wajir, Meru, Uasin Gishu, Narok, Nairobi, Narok, Nakuru, Mandera and Turkana. As a result of the dialogues, community peace pacts and declarations were signed and enforced. In addition, the Commission conducted training and capacity building for peace actors and stakeholders (youth, women, and community leaders) on peace and cohesion in seven counties namely, Kakamega, Mombasa, Kisumu, Uasin Gishu, Nandi, Kilifi and Nakuru where 414 people were trained. The Commission further conducted sensitisation forums for peace actors, stakeholders, and the citizenry to promote peace, cohesion, and national values in 21 counties namely, Nakuru, Kericho, Nandi, Kisumu, Kajiado, Nairobi, Nyeri, Murang'a, Mombasa, Nakuru, Nandi, Trans-Nzoia, Uasin Gishu, Baringo, Garissa, Kakamega, Embu, Narok, Nyamira, Turkana and Laikipia. As a result of the sensitisations, 4,608 people (youth

Women, elders) were reached directly.

To support and enhance a safe digital space in the management of hate speech and ethnic contempt, the Commission continuously monitored political meetings, media houses as well as social media platforms. In the period under review, 245 incidences of hate speech and ethnic contempt were identified from social media platforms and were flagged for investigation. In the same period, the Commission managed 53 cases of hate speech and ethnic contempt, out of which 32 are under investigation, nine are under conciliation, five are before court and seven have been concluded.

The Commission in partnership with the Ministry of Education and TSC have been working together to facilitate the establishment of the Peace *(Amani)* Clubs, in educational institutions. *Amani* Clubs are expected to provide young people with avenues to confront negative ethnicity, in a targeted way, and plant seeds of appreciation of diversity and tolerance thereby enabling students to learn to co-exist harmoniously despite their ethnic, racial or religious differences.

Implementation Challenges

- Budgetary constraints - inadequate staff, limited regional presence to upscale and sustain interventions at the grassroots level.
- Multiplicity of emerging drivers of conflicts and violence
- The slow judicial process in the determination of cases of hate speech, ethnic contempt and incitement to violence.
- Limited resources to ensure the sustainability of community social contracts and peace agreements.

Lessons Learnt

- Community engagement in conflict management leads to sustainable peace and stability.
- Peace and reconciliation processes are not isolated events but rather continuous processes requiring consistent engagement.
- Citizens' expectations on public service delivery influence their attitudes, behaviour, and trust levels in government agencies.

Recommendations

- Strengthen collaboration and partnership through the multi-agency approach.
- Conduct regular stakeholders' consultation and engagement.
- Enhance the funding base through PPPs and donor support.

4. CHAPTER FOUR

ECONOMIC PILLAR

"Moving the Economy up the Value Chain"

The Economic Pillar aims to achieve and sustain an average economic growth rate of 10 percent per annum by 2030. The key sectors under the Economic Pillar are Tourism; Agriculture and Livestock; Manufacturing; Trade; BPO/ITES; Financial Services; Oil, Gas and Mineral Resources; and the Blue Economy.

The section below provides the Sector progress and performance achievements of flagship programmes and projects under the Economic Pillar for the FY 2021/22. It also provides implementation challenges, lessons learnt and recommendations/way forward.

4.1. AGRICULTURE AND LIVESTOCK

The Agriculture and Livestock Sector seeks to be an *'Innovative, Commercially Oriented and Modern Agriculture and Livestock Sector'.* The Economic Pillar of the Kenya Vision 2030 identifies agriculture as one of the key sectors to drive the Kenyan economy to the projected 10 percent annual economic growth. It is also a key driver towards the attainment of 100 percent food and nutrition security for the Kenyan population in addition to being a major source of employment, foreign exchange earnings and raw materials for the agro-based industries. To sustain the contribution of agriculture towards attainment of Kenya Vision 2030, the Sector developed the Agriculture Sector Transformation and Growth Strategy (2019-2029) that aims at transforming agriculture into an innovative, commercially oriented and modern sector.

Most of the key agriculture sub-sectors recorded declined performance resulting in a contraction of negative 0.2 percent in 2021 compared to a growth of 5.2 percent in 2020. The observed performance was attributed to erratic and poorly distributed long rains as well as inadequate short rains. However, the sector remained the dominant sector, accounting for about 22.4 percent of the overall GDP in 2021. Real GDP in Kenya grew by 7.6 percent in 2021 compared to a contraction of 0.3 percent in 2020. The recovery was mainly driven by resumption of most economic activities after the lifting of the COVID-19 containment measures.

Progress made in the specific flagship programmes and projects within the agriculture sector is as follows.

4.1.1. Implementation of the Consolidated Agricultural Reforms Legislations

Location: Nationwide

Objective: To review and harmonise the legal framework to rationalise the developmental, regulatory, licensing, processing and marketing roles of agricultural parastatals.

Implementing Agencies: Ministry of Agriculture and Livestock Development, and Agriculture and Food Authority.

Project Progress: During the period under review, the following policies and regulations were approved and gazetted: Crops (Irish Potato) Regulations; Crops (Fibre Crops) Regulations; Crops (Coffee) Regulations; Crops (Oils and Nut Crops) Regulations; Crops (Sugar) Regulations; Crops (Food Crops) Regulations; Crops (Nairobi Coffee Exchange) Regulations; Crops (Horticultural Crops) Regulations; Warehouse Receipt System Regulations, and Dairy Industry Regulations.

Implementation Challenge

- Financial constraints due to budget cuts and late release of funds.

Recommendations

- Mobilise more resources outside the Government to cushion against budget cuts and delays in release of funds.
- Fast track the development and review of the legal and policy frameworks to provide an enabling environment for agricultural projects implementation.
- Continuously implement the agricultural sector reforms to hasten attainment of food and nutrition security.
- Align the organisational cultures and structures of the merged institutions.

4.1.2. Fertilizer Cost Reduction

Location: Nationwide

Objective: To make fertilizer more affordable and easily accessible to farmers and to increase agricultural production by improving the purchasing and supply chain and supporting local manufacture of fertilizer.

Implementing Agency: Ministry of Agriculture and Livestock Development.

Project Progress: The e-voucher programme was implemented in 38 counties targeting maize, coffee, rice, irish potato, and sorghum value chains. An additional 13 counties, comprising 35,042 farmers, were supported with assorted inputs of cereals and pulses. The Government set aside KSh. 5.734 billion to subsidise 114,000MT (2,280,000 x 50kg bags) for farmers growing food crops. These quantities were expected to support the cultivation of 1.13 million acres.

Implementation Challenges

- Limited funding for implementation of agricultural programmes; and
- The climate change phenomenon had a direct effect on agricultural production.

Lesson Learnt

- Enhanced collaboration and partnerships amongst all levels to establish sharing of resources and information is critical.

Recommendations

- Enhance linkages and build strong collaborations with all the stakeholders, particularly between the National and County Governments to ensure sustainable food security and efficient service delivery.
- Embrace climate smart technologies to mitigate emerging issues such as COVID-19 pandemic.
- Enhance collaborations and partnerships with development partners to support funding of agricultural activities.

4.1.3. Arid and Semi-Arid Lands Irrigation Projects

a) Galana-Kulaluc Irrigation Development Project

Location: Kilifi and Tana River.

Objective: To develop 10,000 acres under irrigation and contribute directly to maize and horticultural production in the country.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, and the National Irrigation Authority (NIA).

Project Progress: During the review period, a total of 5,100 acres of land out of the 10,000 acres developed for irrigation was cropped. Lot 1 of the Galana Kulalu project included the installation of 3 No.1 MVA and 15 No. 15 KVA water cooled engines and power generators complete with controls, provide, install, test and commission electric motor driven pumps and pump house construction and associated structural elements was done. Lot 2 of the project that deals with pipe work (excavation, pipe supply and laying) for 36.9km, supply and installation of 25No. centre pivots (5,100 acres) and fencing and site works is ongoing.

Implementation Challenge

- Limited funding for the expansion of the irrigation infrastructure and cropping.

Lesson Learnt

- Enhanced collaboration and partnerships amongst all levels to establish sharing of resources for crop production is crucial.

Recommendation

- Enhance collaborations and partnerships with development partners and the private sector to support funding of infrastructure and production.

b) Bura Irrigation Scheme

Location: Tana River

Objective: To convert the scheme from a pump-fed system to a gravity-fed system, to reduce the cost of production and achieve a sustainable supply of irrigation water.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, and NIA.

Project Progress: During the period under review, construction of a gravity system to irrigate 15,000 acres was ongoing at 60 percent completion rate. The project was divided into 2 lots. Lot 1 was sheet piling and associated with Korakora intake works which included a submerged weir, diversion canal, head regulator and a silting basin. The overall percentage of work completed is 96.9 percent. Lot 2 focused on the construction of a new main canal and associated civil works from Korakora to Nanigihi. It involved canal excavation and lining, construction of service road, construction of dyke and construction of associated civil structures. The overall completion rate is 50.1 percent.

Implementation Challenges

- Time loss in construction works.
- Escalation of project costs.
- Inadequate capacity farmers to engage in crop production activities because of financial and marketing challenges.
- Reduced efficiency and distribution of irrigation water.

Lessons Learnt

- Financing irrigation development through cost sharing model with project beneficiaries improves rate of irrigation development, ownership and sustainability.
- A multi-agency approach with relevant stakeholders on security of critical irrigation infrastructure is essential.
- Focus and financing of research and innovation in the sector to improve absorption and utilisation of new technologies.
- Incorporate capacity building in all projects and programmes targeting all stakeholders from decision makers to subsidiary implementers results to sustainability and resilience.
- Collaboration between County and National Governments is essential for sustainable environment, basin-based development, water resource, sanitation, land reclamation and irrigation management.

Recommendations

- Continuous engagement of Parliament and the National Treasury to enhance communication with project implementation agencies for financing.

- Build the capacity of farmer groups on governance, irrigation and agricultural development and market linkages.
- Fast-track the gravity system.
- Engage the private sector to uptake expanded land for increased production.

c) Turkana Irrigation Development Project

Location: Turkana

Objective: To put 2,300 acres under irrigation to increase food security in the area.

Implementing Agencies: Ministry of Water and Sanitation, and NIA.

Project Progress: The project is 80 percent complete with 1,860 acres already put under irrigation. Crops grown include maize, green grams, sorghum, millet, and horticultural products.

Implementation Challenges

- Farmers take a long time to optimise utilisation of irrigation water.
- Limited support from the county governments.

Recommendations

- Enhance the use of groundwater together with solar power to increase access to irrigation across the country.
- Build capacity of farmers on absorption of water for irrigation.

d) Mwea Irrigation Development Project

Location: Mwea, Kirinyaga County

Objective: To ensure continuous availability of irrigation water for rice growing in Mwea and further expansion of 8,000 acres.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, and NIA.

Project Progress: The project includes development of Thiba Dam to impound 16 million cubic metres (Lot 1) and to develop irrigation infrastructure and associated amenities to expand irrigation area by further 8,000 acres. On components being implemented, construction of dam embankment, spillway, silt trap and outlet works; river diversion, integrated cofferdam, dam outlet (95 percent) and dam instrumentation was fully completed.

Implementation Challenges

- Inflation caused project costs to go high due to a changing exchange rate.
- Delayed compensation due to litigation issues.
- Erratic climatic conditions.

Recommendation

- Harmonise land tenure systems in the country.

e) Water Storage Programme

Location: All Counties

Objective: Impounding water to advancing irrigated agriculture in the country.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, and NIA.

Project Progress: The programme had planned to harness 9.4 cubic million metres of water to irrigate approximately 8,400 acres across the country through impounding water under household and community pans. Increased demand and supplementary budgetary support facilitated development of over 10,000 acres under irrigation using impounded water.

Implementation Challenges

- Climate change is adversely affecting impounding efforts.
- High demand for programmes by beneficiary communities.
- Inadequate funding.

Recommendations

- Increase funding.
- Build the capacity to enhance utilisation and sustainable use of impounded water.
- Ensure sustainability of projects through lining of the pans.

f) National Expanded Irrigation Programme

Location: Countrywide

Objective: Contributing towards food security through irrigation area expansion

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, and NIA.

Project Progress: The National Irrigation Authority has cumulatively developed 650,000 acres under irrigation within the country with 33,515.11 acres being expanded in 2021/22 year under the programme.

Implementation Challenges

- Budget cuts.
- Insecurity in some parts of the country.
- Lack of capacity building.
- Weak collaboration frameworks.

Recommendations

- Increase funding to this key deliverable.
- Capacity building and production support should be enhanced.
- Increase and prioritise training programmes for farmers.

g) Wei Wei Irrigation Project

Location: Sigor Constituency, West Pokot County.

Objective: To put 600 ha of land under irrigation to increase food security in the area.

Implementing Agencies: Ministry of EAC, the ASALs and Regional Development, and Kerio Valley Development Authority (KVDA).

Project Progress: A total of 600 ha was developed in three phases. Phase I and II developed a total of 275 ha which was used for seed maize production. The irrigation system for Phase III was developed and is expected to irrigate a total of 325 ha. In addition, the scheme was fenced. The project is behind schedule due to challenges and the rate of completion is 70 percent during the reporting period.

Implementation Challenges

- Delay in awarding contract and approval of the prerequisite requirements.
- Delay in release of funds.
- Inadequate GoK funding to support the project.
- Limited support from the County Government of West Pokot.
- Farmers limited technical skills to enhance production.

Lessons Learnt

- Over-reliance on limited funding from the exchequer is not sustainable in project implementation.
- Stakeholder engagement is crucial for successful implementation of projects.
- Capacity building is key to ensure project sustainability.

Recommendations

- Provide adequate project funds.
- Enhance approval processes for the contractor to take over the site and progress the project.
- Build capacity for the farmers.
- Engage all stakeholders in the planning and implementation of projects.

h) Napuu Centre Pivot Irrigation Project

Location: Turkana Central, Turkana County

Objectives: To develop a centre pivot irrigation infrastructure on 150 acres for crop production to enhance food security and reduce dependency on relief food; improve access to water for farming, human and livestock consumption; and build the capacity of the youth and women to be engaged in gainful employment through agro based incomes and dry land agricultural activities.

Implementing Agencies: Ministry of EAC, the ASALs and Regional Development, and KVDA.

Project Progress: Under this project, a centre pivot irrigation infrastructure was developed on 150 acres; three boreholes were constructed and equipped; and 35 acres of land planted with watermelon, green grams and sorghum. The project is behind schedule due to challenges and the rate of completion is 60 percent during the reporting period.

Implementation Challenges

- Inadequate GoK funding to support the project.
- Delay in release of funds.
- Limited support from the community and County Government.
- Farmers lack technical skills to operate the farm.
- Mindset change (changing from pastoralists to farming).
- Farmers have been relying on handouts from Non-Governmental Organisations (NGOs) creating dependency.

Lessons Learnt

- Over-reliance on limited funding from the exchequer is not sustainable for the implementation of projects.
- Stakeholder engagement is crucial for successful implementation of projects.
- Capacity building is key to ensure project sustainability.

Recommendations

- Provide adequate project funds.
- Build capacity of farmers
- Engage all stakeholders in the planning and implementation of projects.

4.1.4. Disease-Free Zones - Bachuma Livestock Export Zone

Location: Taita Taveta

Objective: To facilitate market access for livestock and livestock products to local, regional and international markets.

Implementing Agency: State Department for Livestock Development.

Project Progress: The facility aims to provide sanitary compliance of animals destined for export markets through testing and prevention of trans-boundary animal diseases and aiding international veterinary certification. The expected outcome was a livestock export quarantine with expected turnover of 50,000 cattle, 100,000 sheep and goats and 10,000 camels annually.

Overall, the project is 80 percent complete. Phase I is 100 percent complete while Phase II is 65 percent complete. There was no progress made in FY 2021/22 since there was no budget allocation and the contract had been terminated on 25th March 2021 due to breach by the contractor which was attributed to delays in construction works and default of contract terms by the contractor. The contractor raised an appeal to the termination and further extension of time to complete the pending works. The appeal has not been fully addressed because of legal issues of contract termination.

Implementation Challenges

- Financial constraints due to lack of budget allocation.
- Breach of contract by the contractor hence failure to deliver the project in time.
- Destruction by wildlife.

Lesson Learnt

- Monitoring and evaluation enhance effective and efficient utilisation of resources for timely achievement of the desired results.

Recommendations

- Undertake due diligence of contractors before onboarding.
- Lease the facility as it is under the Lands Act to a private investor to complete and manage through a long-term lease agreement.
- Assess and develop bills of quantities for pending works for Phase II contract and mobilise funds for completion through the medium-term expenditure framework for the budget process.
- Enhance linkages and build stronger collaborations with all the stakeholders, particularly between National and County Governments.

4.1.5. Youth and Women Empowerment in Modern Agriculture Programme

Objective: To create sustainable and gainful self-employment for the youth and women through participatory engagement in agriculture.

Implementing Agency: State Department for Crop Development.

Project Progress: The Government offers incentives for integration of youth and women into agribusiness value chains. The construction and equipping of Ruiru, Mabanga & Siakago Agricultural Technology Development Centre agro processing units for incubation of SMEs was 30 percent complete. Pilot operationalisation of machinery hubs for maize, rice and potatoes was done by procuring a transplanter and harvester for use by rice farmers in Bunyala Irrigation Scheme and potato planter and lifter for use by farmers in Murungaru Potato Aggregation Centre. A total of 261 incubates were trained during the reporting period, with 172 being male and 89 being female. Overall, the project is 60 percent complete.

Implementation Challenges

- Inadequacies in the performance of the contracted incubator (training & incubation service provider).
- Low disbursement rate of youth agribusiness funds by the Agricultural Finance Corporation.
- Youth are more inclined to the production node across value chains and need to be redirected to integrate vertically and reap more benefits in their respective value chains.

- Start-ups need capital investment funding to develop competitive agribusinesses.

Recommendations

- Terminate contract with the training & incubation service provider and identify a capable incubator to oversee and guide implementation of the two remaining incubation cycles; and
- Re-design the financing guidelines of the lending partner (Agricultural Finance Corporation) to embrace affirmative action in youth agribusiness financing.

4.1.6. Agricultural Mechanization Project

Location: Trans Nzoia, Nakuru, Kilifi and Laikipia Counties.

Objective: To meet the demand for certified hybrid seeds, grass seeds and breeding of dairy and beef heifers for sale to farmers at affordable prices.

Implementing Agency: Agricultural Development Corporation (ADC).

Project Progress: The project completion rate stood at 22 percent. Following the procurement of some machinery, ADC had increased land under crop production by 5,000 acres as at the end of FY 2020/21 against the MTP III target of 28,000 acres and produced 1,130.9 MT of seed potato against a target of 5,500 MT. Further, 6.3 million kilograms of certified hybrid seed maize were produced during the year against the MTP III target of 23 million kilograms. On production of commercial maize, 23, 634 bags (90 kg bags) were produced against a target of 325,000 bags also due to low completion rate of the project. The Soy Mateeny Society hub in Uasin Gishu for the maize value chain was operationalised during the period under review.

Implementation Challenge

- Implementation of mechanisation of ADC was affected by budget cuts.

Lessons Learnt

- The choice of tractors can affect the overall efficiency of operations. It is difficult to identify and procure tractors considering the procurement, outsourcing and transportation from point of origin.
- Mechanization enhanced production of ADC farm units. However, other factors can impact on the overall performance of the farms.
- Mechanization is encouraging minimisation of production cost through an efficient fleet management system.
- Leasing machinery to stakeholders outside ADC would enhance financial resources for the programme.

Recommendations

- Adequate and timely disbursement of funds.
- Allocate funds for contingency to allow for repairs, services and upgrades of machinery.
- Enhance training of tractors and plant operators for optimum utilisation of the machinery.

4.1.7. Livestock Genetic Centre, Sabwani

Location: ADC Sabwani Farm – Kitale, Trans-Nzoia.

Objective: To complement local genetic supply and provide genetic diversity.

Implementing Agency: ADC

Project Progress: The project was 91.6 percent complete at the end of the period with three components pending due to funding challenges. Overall, the project has been a success story with the facility having produced and processed over 1.4 million straws of semen since its inception in 2018.

Implementation Challenges

- Inadequate supply of liquid nitrogen for production, processing, and preservation of semen. This was caused by frequent breakdown of the liquid nitrogen plant and power interruptions.
- Lack of a truck for distribution of liquid nitrogen greatly impeded sale of semen to agents since the product could not be sold to inseminators in the field without liquid nitrogen.
- Insufficient number of bulls in production. The Centre had the capacity to hold 100 bulls, but it had only 72 studs at the end of the year under review.
- High cost of production of liquid nitrogen. This is because the liquid nitrogen plant uses a lot of electricity to produce liquid nitrogen. This is compounded by the fact that the cost of power from the national grid is very high.
- Lack of spares and local expertise for repair and maintenance of liquid nitrogen plants.

Lessons Learnt

- Competition in a market (Artificial Insemination) creates great benefits to consumers (farmers). The quality of service has gone up in the industry.
- Projects come with unexpected challenges - breakdown of plant and power interruptions.
- The price of semen has a big impact on the performance of the Centre.

Recommendations

- Build synergy between the National and County Governments to enhance capacity for liquid nitrogen production.
- Increase budgetary allocation for the programme to facilitate the purchase of breeding bulls and a distribution truck for liquid nitrogen.
- Reduce the cost of electricity by adopting cheaper sources of energy such as solar to run the liquid nitrogen plant.
- Build local capacity for repair and maintenance of liquid nitrogen plants.
- Support marketing to make the Centre fully operational and create sustainability.

4.1.8. Livestock Production Programme

Location: Baringo, Wajir, Samburu, West Pokot and Narok.

Objective: To improve/upgrade existing genetic material at the strategic Government livestock farms and neighbouring counties.

Implementing Agency: State Department for Livestock Development.

Project Progress: Cumulatively, four bull schemes were established for breeding purposes in Kimose (Baringo County), Griftu Livestock Training Centre (Wajir County), Nomotio Livestock Farm (Samburu County) and Nasukuta (West Pokot County).

Implementation Challenge

- Inadequate budget allocation and budget cuts.

Recommendations

- Promote feedlots and pasture production and conservation in Government land,
- Support private feedlot operators through credible PPPs.

4.1.9. Enhancement of Capacity for Semen Production

Location: Kenya Animal Genetic Resources Centre, Lower Kabete -Nairobi County

Objective: To produce, distribute and conserve high-quality disease-free semen/ germplasm to improve livestock breeds.

Implementing Agency: Kenya Animal Genetic Resources Centre (KAGRC).

Project Progress: Overall, 943,776 straws of semen were produced against a target of 1,100,000. The Centre has had remarkable growth in the number of bulls, semen and liquid nitrogen sales and production of fodder. To date, the Centre has recruited a total of 104 bulls. The Centre has three liquid nitrogen plants which produce liquid nitrogen for use at the KAGRC semen processing laboratory and surplus for sale.

Implementation Challenges

- High costs of semen production inputs mostly imported from France & Germany.
- Inadequate liquid nitrogen for processing due to breakdown of KAGRC liquid nitrogen plants.
- Drought in the country results in a shortage of fodder and feeds for the breeding animals.

Lessons Learnt

- The need to invest in backup semen production equipment.
- The need to maintain semen reserves that can sustain demand for at least two years without production in case of any eventuality.
- Incorporation of the project in performance contract forms the basis for ensuring the efficient and effective service delivery to Kenyans.

Recommendations

- Seek tax waivers on semen production inputs.
- Enter service level agreements with the manufacturers of semen production equipment to undertake servicing and maintenance.

4.1.10. Establishment of Goat Artificial Insemination Centre

Location: Ndomba, Kirinyaga County

Objective: To produce and distribute affordable goat semen of high genetic quality and avail the same to farmers in Kenya for breeds' improvement.

Implementing Agency: Kenya Animal Genetic Resources Centre (KAGRC).

Project Progress: The laboratory and goat structures are complete. Office and laboratory equipment have been acquired. Staff have been trained and 35 bucks have been identified and recruited for semen. Commissioning of the facility is scheduled for May 2023.

Implementation Challenges

- The delay in the release of funds affected the completion rate.
- Inadequate skilled personnel to undertake goat artificial insemination services.

Lessons Learnt

- KAGRC can develop training needs and partner with relevant stakeholders to train its staff and already practise artificial insemination providers.
- The need to involve other players in the value chain, especially inseminators.
- Involvement of the public works team and Directorate of Veterinary Services ensured that the Centre met the necessary structural requirements.

Recommendations

- Timely release of adequate project funds.
- Embrace alternative financial mechanisms such as PPP to supplement the resource gap requirements.
- Enhance the institutional capacity challenges through recruitment and capacity building of technical staff.
- KAGRC should collaborate with research and training institutions for validation of the technologies and curriculum development respectively.

Goat A.I. Centre main gate

Goat A.I. Centre Compound

Goat Semen Laboratory

State of Art Goat Semen Laboratory

4.1.11. Establishment of Liquid Nitrogen Plants

Location: Lower Kabete, Nairobi County; Sotik, Bomet County; and AHITI Ndomba, Kirinyaga County.

Objective: To produce and avail of liquid nitrogen for preservation and conservation throughout the cold chain for improved artificial insemination services.

Implementing Agency: KAGRC

Project Progress: Three plants are currently operational (Kabete, Sotik and Kirinyaga). 269,044 litres of liquid nitrogen were produced and distributed for semen preservation against a target of 350,000 litres. The Eldoret, Nyahururu and Meru plants are not operational. KAGRC utilises the facilities as product distribution shops in support of devolution by taking services closer to farmers.

Implementation Challenges

- Inadequate funding to replace the ageing plants that are not producing optimally.
- High maintenance cost.
- High electricity tariffs make liquid nitrogen production very expensive.
- Power blackouts, especially in Sotik and Kirinyaga affect optimal productivity of the plants.

Lessons Learnt

- The need to invest in back-up generators and heavy-duty UPS to sustain production during power outages.
- Investment in solar energy to power liquid nitrogen production.
- Use of other semen preservation medium schools as carbon dioxide.

Recommendations

- Provide adequate resources, backup generators and other equipment.
- Lobby for reduction in electricity tariffs.
- Invest in backup generators and heavy-duty uninterruptible power supply to sustain production during power outages.
- Enter into service level agreements with the manufacturers for liquid nitrogen plant maintenance.

4.1.12. Livestock Value Chain Support Programme

Location: Nationwide (except Nairobi County)**.**

Objective: To minimise post-production milk spoilage and losses and contribute to food and nutrition security.

Implementation Agency: State Department for Livestock Development.

Project Progress: A total of 380 bulk milk coolers were installed in 36 counties creating employment opportunities for women and youth in the dairy value chain and resulted in increased milk cooling capacity in the country by over 1.2 million litres per day and reduced post-harvest losses in milk production. In addition, equipping a Tea Research Factory in Kericho and standardisation of hides and skins was implemented in the financial year.

Implementation Challenge

- Inadequate budget allocation

Recommendation

- Provide adequate funding

4.1.13. Agricultural Insurance Programme

a) Livestock Insurance

Location: Eight counties: Garissa, Isiolo, Mandera, Marsabit, Samburu, Tana River, Turkana and Wajir.

Objective: Enhance pastoralist responses to drought effects through livestock insurance.

Implementing Agency: Ministry of Agriculture and Livestock Development.

Project Progress: In FY 2020/21, a contract was awarded for 90,060 Tropical Livestock Units (TLU) valued at KSh. 4.5 billion benefiting 18,012 households in the eight ASAL counties. Expansion to the targeted 14 counties was not achieved due to budget limitations. Cumulatively, the Government has paid a premium worth KSh. 1.2 billion while payouts by the insurance companies to pastoralists amount to KSh. 1.1 billion. The cumulative value of TLUs which have been placed under the livestock insurance programme is estimated at KSh. 23 billion.

Implementation Challenges

- Budget cuts affected timely payment of premiums.
- Inadequate funding limited expansion of the programme to the targeted 14 counties.

Recommendations

- Promote a partial subsidy initiative to ensure sustainability of the programme and release funds for expansion to other counties.
- Establish a livestock insurance electronic system for data management.

b) Crop Insurance

Location: 38 Counties

Objective: To manage risks and losses amongst smallholder farmers, increase productivity in agriculture through improved access to credit and higher yielding technology such as use of certified seed and fertilisers.

Implementing Agency: State Department for Crop Development.

Project Progress: The number of counties covered increased from 33 to 38 cumulatively. The number of farmers covered with crop insurance was 398,936 against a target of 450,000.

Implementation Challenges

- Low adoption rate.
- Low funding levels and unreliable flow of funds with unexpected and frequent supplementary budgets.
- Lack of counties' funding support.
- Low awareness creation and capacity building.
- High premiums.
- Inadequate extension capacity.

Recommendations

- Establish a digital crop insurance system for data management.
- Streamline payouts responsibilities.
- Develop local capacities in calculating agent services.
- Conduct continuous research into insurance product suitability in all ASAL counties.
- Create awareness to target beneficiaries.

4.1.14. Food Security and Nutrition

Location: Nationwide

Implementing Agency: State Department for Crop Development.

Objective: To improve food production by enhancing farmers' access to certified seeds and control of fall armyworms.

Project Progress: Various crop regulations including Irish potato, fibre crops, oil and nuts, sugar, food crops, and horticultural crops were developed through a consultative process with counties and other stakeholders, and they are currently under implementation.

Maize production was 36.7 million bags which was less than the previous year's production by 12.7 percent and less than the targeted amount of 67 million bags. Rice production increased from 180,390 MT in 2020 to 186,000 MT in 2021 while production of Irish potatoes increased from 1.86 MT in 2020 to 2.1 MT in 2021.

Implementation Challenges

- Inadequate extension capacity.
- Low agricultural productivity due to low application of modern technology and innovation, inadequate capital and demand-driven research.
- High cost of farm inputs.

- Inadequate data for policy planning and development.
- Weak monitoring and evaluation system.
- Pre-and post-harvest losses due to inadequate storage facilities and poor handling of farm produce.

Recommendations

- Enhance linkages and build stronger collaboration with all the stakeholders, particularly between the National and County Governments to ensure sustainable food security and efficient service delivery.
- Explore ways to manage the high cost of farm inputs.
- Strengthen data management systems including the monitoring and evaluation system.
- Embrace irrigation technologies to boost food sufficiency.

4.1.15. Strengthening National Food Reserves

Location: Nationwide

Implementing Agency: State Department for Crop Development.

Objective: To avail sufficient safe food stocks for consumption by promoting technologies in management of aflatoxin.

Project Progress: During the review period, the National Food Reserve and Trading Corporation Bill, 2022 was approved for national validation; timely control of desert locust in the 37 affected counties was undertaken; modular Aflasafe plant in Machakos was completed; 496.65 MT of Aflasafe KEO1 were distributed to farmers as an aflatoxin management strategy to improve food security and reduce post-harvest losses.

Implementation Challenges

- Limited funding for agricultural programmes.
- Climate change and variation had a direct effect on agricultural production.
- Delays/non-disbursement of funds for agricultural activities.
- Inadequate and poorly organised market access and marketing infrastructure.
- Poor physical infrastructure network in the rural areas.

Recommendations

- Foster partnerships with development partners and the private sector to enhance sustainable management of strategic food reserves.
- Enhance budget for running the food reserves and procurement of chemicals to fight aflatoxin.
- Conduct more research to explore viable solutions for food preservation.

4.1.16. Crop Diversification Programme

Location: Nationwide

Implementing Agency: State Department for Crop Development.

Objective: To improve productivity of traditional high value and industrial crops.

Project Progress: Crop development and adoption of new crop varieties and distribution of assorted seeds to farmers was implemented. During the period under review, a total of 1.3 million assorted maize seedlings were distributed to farmers, representing 60 percent achievement. In addition, 72 metric tonnes of certified rice seed against the planned 20 metric tonnes were procured and distributed in 14 counties. The counties were Kisumu, Kirinyaga, Migori, Busia, Bungoma, Kakamega, Homa Bay, Taita-Taveta, Meru, Kwale, Isiolo, Kilifi, Siaya and Tana River.

4.1.17. Research and Capacity Building Programme

Location: Nationwide

Objectives: To build new and innovative capacity for optimal production; to increase production through innovative research technologies; and to revitalise and modernise the Agriculture Resource Information Centre.

Implementing Agencies: State Department for Crop Development, Kenya Agricultural and Livestock Research Organization (KALRO), Kenya Tsetse and Trypanosomiasis Eradication Council, and KAGRC.

Project Progress: During the review period, the capacity of the research institutions was enhanced. Research institutions were supported to focus on new innovative technologies that are pest and herbicide resistant, tolerant and can withstand drought/water stress for enhanced food security and productivity. The Sector continued to strengthen research infrastructure and linkages with international research institutions, universities, and private sector research laboratories.

In addition, research and promotion of technologies for management of fall armyworms and Maize Lethal Necrotic Diseases (MLND) were undertaken. For fall armyworm research endeavour, two biological agents were identified, 300 promising germplasms tolerant to fall armyworm (FAW), two integrated pest managements and three biological extracts against fall armyworm were evaluated. The Kenya Plant Health Inspectorate Service facilitated the introduction of 27 biological products through risk assessment carried out by Kenya Standing Technical Committee on Imports and Exports as a strategy to mitigate various diseases including FAW. Evaluation of five advanced clones tolerant to MLND was put under national performance trials. Promotion of information was done in all the affected counties in the country through distribution of over 46,000 brochures and on-line platforms through the Ministry and KALRO websites. In addition, pest surveillance and monitoring to determine the spread and impact of the pests was done during the period. KALRO produced 180 MT of Aflasafe KE01 and distributed it to farmers.

To enhance livestock value chains productivity, KALRO developed and promoted feeds and forages by formulating and disseminating fifteen feed rations; analysed 3,518 animal feeds delivered by farmers and released two (2) *Bracharia* cultivars and *three (3) SPV* varieties and produced 7,640 kg of the same and availed to farmers.

Implementation Challenges

- Limited local funding for agricultural research leads to a donor-driven/dependent research system.
- There were no mechanisms in place for participation of industry in agricultural research which would focus on relevant applied research.
- Low investment in agricultural research and innovation.
- Inadequate legal and policy frameworks result in weak linkages, coordination, monitoring and evaluation within the agricultural research ecosystem.
- Land grabbing of prime agricultural research land.
- Diminishing human resources (technical and support staff) due to poor succession management policies thereby affecting research programmes.

Recommendations

- Issue title deeds for all allocated land parcels to agricultural research institutions.
- Engage interns to alleviate staff shortage on short term contracts and fast-track and complete the succession management programme to ensure continuity of research programmes.
- Engage graduate fellows in all research projects.
- Cross utilise staff across institutes/centres.
- Enhance collaboration and partnerships amongst research institutions to establish sharing of resources mechanisms.
- Mobilise resources to engage additional support staff.
- Lobby the Government to fund strategic research for posterity.
- Fast-track the development and review of the legal and policy frameworks to provide for an enabling environment for agricultural research.
- Seek tax waivers and electricity tariff reduction to enhance semen production.

4.2. MANUFACTURING

The Kenya Vision 2030 blueprint seeks to achieve a robust, diversified, and competitive manufacturing sector in the country. The Sector has a high potential of investment attraction, employment creation, export expansion, stimulus for agricultural growth and provision of forward and backward linkages with all other sectors. It has a strategic role in technology and innovation as a major platform for diffusion of new technologies to other sectors of the economy. Its overall goal under the MTP III was to increase its contribution to GDP by at least 15 percent by 2022; increase the level of foreign direct investments to US$2 billion; and improve ease of doing business ranking from 56 in 2019 to at least 45 out of 189 countries by 2022.

The manufacturing sector grew by 6.9 percent compared to a growth of negative 0.4 percent recorded in 2020. The sector's growth was mainly due to increased production of cement, leather and related products and dairy products sub-sectors among others. The contribution of the Manufacturing Sector to GDP stood at 7.4 percent in 2021 against the MTP III target of 15 percent. In 2021, the value of output increased by 17.6 percent from KSh. 2.3 trillion in 2020 to KSh. 2.7 trillion. The number of persons employed in the formal manufacturing sector increased by 6.7 percent from 316.9 thousand in 2020 to 338.0 thousand in 2021. This accounted for 11.5 percent of the total number of people employed in the formal sector in the country during the review period.

The achievements under the various flagship projects are as follows:

4.2.1. Establishment of Special Economic Zones

Location: Mombasa, Naivasha, Kisumu and Lamu Counties.

Objective: To provide and facilitate an enabling environment for global and local investors.

Implementing Agencies: Ministry of Industrialization, Trade and Investments, and Special Economic Zone Authority (SEZA).

Project Progress: The development of two public special economic zones, i.e., Dongo Kundu and Naivasha Special Economic Zones reached 7.1 percent and 6.5 percent completion levels respectively. These levels entailed the development of various basic infrastructure for investor attraction. In addition, six private SEZ were gazetted during the period. In the Dongo Kundu SEZ, construction contracts were awarded awaiting finalisation of resettlement exercise by NLC and KPA that have since been approved by the RAP. In addition, a detailed land use plan was developed for Phase I of the Industrial Park, and the draft Land Lease Policy was developed and submitted for approval.

In the Naivasha Industrial Park, works including surveying/beaconing and erection of onsite storage tanks and construction of inland container depot was completed. The construction works for the SEZA administration block, access roads and river protection work commenced. However, delays in re-designing the foundation and approval process impacted progress. The Kisumu and Lamu SEZs, identification of suitable land for two zones in Miwani and Lamu areas respectively, were ongoing with the support of LAPSSET Corridor Development Authority and NLC.

Implementation Challenges

- Delays in finalisation of resettlement action plans for Project Affected Persons (PAPs).
- Inadequate budgetary allocation for the basic infrastructure projects within the SEZs and compensation of people affected by the project.
- Inadequate staffing at SEZA.

Lessons Learnt

- Stakeholder involvement is key in project identification and implementation.
- Adequate funding is critical for successful implementation of capital projects.
- There is a need for implementing agencies to leverage alternative resource mobilisation strategies besides the exchequer.

Recommendations

- Expedite resettlement action plan for Dongo Kundu, Kisumu and Lamu.
- Allocate adequate financial resources for both recurrent and development of basic infrastructure and utilities.
- Review the legal and regulatory frameworks for SEZ.
- Ring-fence funding to the flagship projects.

4.2.2. Transformation of KIRDI into a World Class Research Institution

Location: Nairobi and Kisumu Counties.

Objective: To enhance capacity for research & development and technology transfer.

Implementing Agencies: Ministry of Trade, Investments and Industry, and KIRDI.

Project Progress: During the review period, the construction of research, technology and innovation laboratories at KIRDI in South B was at 79.5 percent completion level. In addition, 41 industrial technologies were developed and transferred to Small and Medium Enterprises; 1,112 MSMEs were supported through provision of incubation and common manufacturing facilities, capacity building and consultancy services, laboratory testing and analysis; leather laboratories in Kisumu were fully operationalised by equipping of food processing, natural products, and energy laboratories completed and operationalised.

Implementation Challenges

- Inadequate financial resources.
- Technology obsolescence of some tendered bills of quantities occasioned by delays during the construction phase.

- Frequent budget rationalisation/cuts affect the construction of projects.

Lesson Learnt

- It is important to fast-track completion of flagship projects to avoid cost variations.

Recommendation

- Mobilise resources from GoK, development partners and the private sector to facilitate the completion of requisite infrastructure.

4.2.3. Integrated Iron and Steel Mills

Location: Lamu and Kwale Counties.

Objective: To establish an integrated iron and steel mill for production of high-grade steel.

Implementing Agencies: Ministry of Trade, Investments and Industry, and Numerical Machining Complex Limited (NMC).

Project Progress: Engagement with potential technology partners, joint venture investors and financiers, the PPP proposal was submitted to the National Treasury for approval and onward engagement with investors. Engagement on the acquisition of 750 acres of land next to Lamu Port is ongoing.

In addition, 75.7 tonnes of castings were produced, and 367,177 transmission parts/ industrial fittings were manufactured. The modernisation of NMC Foundry Plant and Computer Numerically Controlled & Fabrication Workshop was at 33.8 percent completion level.

Implementation Challenges

- Delay in finalisation and adoption of Iron and Steel Bill and Policy.
- Inadequate budgetary allocation to implement the project.
- Weak collaboration among implementing agencies.

Lesson Learnt

- Collaboration among implementing agencies is essential in the implementation of planned projects.

Recommendations

- Strengthening the legal and institutional frameworks of NMC.
- Undertake a feasibility study on the quantities and quality of the iron ore and coal deposits in the country.
- Finalise the Iron and Steel Bill Policy.
- Strengthen collaboration among implementing agencies for effectiveness.

4.2.4. Establishment of a One Stop Shop Centre at Kenya Investment Authority

Location: Nairobi

Objective: To establish staff and equip the OSC for improvement in the ease of doing business. The Centre is meant to facilitate investors by bringing all the stakeholders involved in the investment journey under one roof.

Implementing Agencies: Ministry of Investments, Trade and Industry, and KenInvest.

Project Progress: The Centre has been established, equipped and staffed although not at optimal levels. It hosts the following institutions: Kenya Revenue Authority, Department of Immigration Services, National Environment Management Authority (NEMA), KPLC, Business Registration Services and Export Processing Zones Authority (EPZA) and SEZA. KenInvest has further engaged several other key institutions for onboarding onto the OSC. These include the Council of Governors, NLC and EPZA, National Construction Authority, Office of the Attorney General, Pharmacy and Poisons Board and Ministries with investment facilitation mandates.

KenInvest One Stop Centre (OSC) Offices at Old Mutual Tower 14th & 15th Floor.

Implementation Challenges

- Inadequate funding affected the full implementation of the project on time including system installations, equipment for all officers as well as filling staffing gaps.
- Capacity constraints due to delays onboarding key institutions onto the OSC framework. Most agencies lack adequate staff, hence derailing the onboarding process.

Recommendations

- Provide adequate funding for the full operationalisation of OSC.
- Ensure continuous improvement of OSC framework to fully equip, staff and digitise to enhance ease of doing business environment.
- Harmonise investment laws, regulations and policies to create synergies across the private and public sector.

4.2.5. Development of the Industrial Clusters - Manufacture of Leather and Leather Products, Kenya Leather Industrial Park

Location: Kinanie, Machakos County

Objective: To propel Kenya towards becoming a regional leather and leather products manufacturing hub.

Implementing Agencies: Ministry of Investments, Trade and Industry; Ministry of Agriculture and Livestock Development, Kenya Leather Development Council (KLDC), and EPZA.

Project Progress: Common Effluent Treatment Plant is at 80 percent completion rate. The 2500m^2 and 5000m^2 warehouses are at 80 percent and 85 percent completion respectively. Park occupation criteria developed. The two corporates of KLDC and EPZA through their line Ministries are addressing the lease issues. Enabler components are at different stages of implementation. Roads are at 40 percent, while water, power, ICT and Police Post are still pending.

Implementation Challenges

- Low funding and delay in the release of allocated funds
- Weak institutional and legal framework
- Limited technical staff.

Recommendations

- Timely release of adequate project funds.
- Address legal and institutional weaknesses and create synergies with the project enabling sectors including roads, water, power, ICT, and security to support implementation of the project.
- 60 percent of park land requires sound flood mitigation measures which may include the need to acquire land on higher grounds.
- Enhance the institutional challenges through recruitment of technical staff.

4.2.6. Industrial Clusters Programme - Upgrading of Training and Production Centre for Shoe Industry Thika and Kariokor Common Manufacturing Facility

Location: Kiambu and Nairobi Counties

Objective: To upgrade and modernise machinery for TPCSI, Thika and Kariokor Common Manufacturing Facility for provision of common manufacturing services.

Implementing Agency: Ministry of Investments, Trade and Industry; Ministry of Agriculture and Livestock Development, and KLDC.

Project Progress: Construction of an industrial warehouse at Kariokor completed and operationalised. Under the TPCSI, equipment and machine upgrades were completed.

Implementation Challenge

- Delayed operations due to machine breakdowns.

Recommendation

- Provide adequate resources to employ repair technicians at Thika TPCSI and Workshops at Kariokor.

4.2.7. Development of the Industrial Clusters - Athi River Textile Hub

Location: Athi River, Machakos County.

Objective: To promote and facilitate export-oriented investments through the provision of basic infrastructure facilities for export processing zones.

Implementing Agencies: Ministry of Investments, Trade and Industry; and EPZA.

Project Progress: The completion of the textile hub at the Export Processing Zone (EPZ) in Athi River reached 70 percent completion level. Total sales by EPZs enterprises increased by 21.5 percent to KSh. 98.7 billion in 2022 while exports stood at KSh. 98.14 billion in 2022 up from KSh 85.4 billion. The number of jobs created in EPZ enterprises stood at 72,966 people.

Implementation Challenges

- Inadequate funding for the project.
- Delayed release of funds from the exchequer.

Recommendations

- Enhance funding opportunities and financial support for industrial development.
- Widen market access and secure new markets for industrial products.

Athi River Textile EPZA

Industrial Shed in Cluster II

4.2.8. Development of the Industrial Clusters - Textiles and Apparel Production at Rivatex East Africa Limited

Location: Eldoret, Uasin Gishu County.

Objective: The project aims to modernise the Rivatex East Africa Limited factory machinery for increased textiles and apparel manufacturing.

Implementing Agencies: Ministry of Trade, Investments and Industry, and Rivatex East Africa Limited.

Project Progress: During the period under review, modernisation of Rivatex East Africa Limited machinery reached 96 percent level of completion. This led to increased daily consumption of cotton lint from four to 14 tonnes. The country approved the adoption of BT (genetically modified) cotton which has increased cotton production from the previous yield of 200 kg per acre to 1200 kg per acre. To increase the production of apparel, two value addition centres were established at Nyando and Karichen reaching a completion level of 47.6 percent and 91 percent respectively.

In addition, the Common Effluent Treatment Plant was completed to provide recycling and treatment to wastewater, processed 12,000 kg of yarn daily, made 16,800 spindles up from 500 daily, and increased output from 4,000 metres of cloth to 30,000 metres per day.

Implementation Challenges

- Shortage of raw materials caused by increased processing capacity.
- Influx of imported fabrics and second-hand clothes.
- Competition with cheaper fabrics imported from the Asian markets and second-hand clothes into the Kenyan market.

Recommendation

- Regulate importation of textile products and second-hand clothes.

Modernisation of Rivatex East Africa Limited Machinery

4.2.9. Accreditation, Industrial Property Rights and Standards Programme

Location: Nationwide

Objective: To strengthen the quality infrastructure and industrial property rights protection and to meet the rapidly changing consumer needs, protection of innovations and quality requirements towards fostering a conducive environment for quality assurance, innovation and competitiveness in various sectors of the economy.

Implementing Agencies: Ministry of Investments, Trade and Industry, Kenya Accreditation Service (KENAS), KIPI, Anti-Counterfeit Authority, and Kenya Bureau of Standards (KEBS).

Project Progress: To promote accreditation of conformity assessment, KENAS reviewed 63 applications from new applicants and scope extension for existing clients, conducted 259 assessments, accredited 23 new conformity assessment bodies, and delivered 39 training courses. To enhance industrial property rights protection, KIPI processed 510 patents, and registered 140 utility models, 179 industrial designs and 4,966 trademarks in the year under review to support the growth of the industrial sector. To counterfeiting, trade and other dealings in counterfeit goods, two godowns were acquired for storage of exhibits and 7,907 inspections were undertaken. The Sector developed a total of 1,082 new standards and issued 6,491 permits to SMEs and 16,660 to large enterprises. In addition, the construction and equipping of KEBS laboratories at Lake (Kisumu) and North Rift (Eldoret) regions were completed.

Implementation Challenges

- Lack of a national quality policy to guide the coordination of quality infrastructure programmes in Kenya.
- Weak legal framework for accreditation and standardisation services of SMEs and for protection of indigenous knowledge and geographical indications.

Recommendations

- Fast-track adoption and implementation of a national quality policy.
- Develop legal framework for accreditation, intellectual property rights and standardisation services for SMEs.
- Finalise legislation covering protection of indigenous knowledge and geographical indications.

KEBS Kisumu Offices & Laboratories

KEBS Eldoret Offices & Laboratories

4.2.10. Micro, Small and Medium Enterprises Development Programme

Location: Nationwide

Objective: To create an enabling environment to facilitate the development, survival, and accelerated growth of MSMEs in the manufacturing/value addition activities/enterprises.

Implementing Agencies: Ministry of Trade, Investments and Industry, Ministry of Cooperatives and MSMEs Development, Micro and Small Enterprises Authority (MSEA), and Kenya Industrial Estates (KIE).

Project Progress: Kenya Industrial Estates advanced industrial credit to MSMEs amounting to KSh. 1.03 billion. Consequently, 31,177 jobs were created, 56,854 entrepreneurs trained and 5,624 MSMEs facilitated access to local, regional, and international markets in the period under review. The MSEA refurbished and operationalised 20 Constituency Industrial Development Centres (CIDCs), creating a total of 3,966 jobs. In the period the Authority provided support for MSMEs through capacity building and skills development where 203 MSMEs were trained on use of lathe machines installed at various CIDCs, 368 MSEs were trained and equipped with digital literacy skills at the Kariobangi Centre of Excellence in Nairobi and Mitunguu CIDC in Meru with the majority being the youth and 150 Master Crafts Persons were registered and trained using an online business development service portal.

In addition, Kariobangi Centre of Excellence was rehabilitated to provide a one stop shop facility for MSMEs to access decent work environments, skills and technology transfer. The Centre houses the Nairobi Biashara Centre providing one-stop services to MSMEs from various agencies in the MSME ecosystem. Furthermore, MSEA implemented Component 2 of the Kenya Youth Employment and Opportunities Project (KYEOP) in partnership with the World Bank in 18 counties. The project aims to support vulnerable youths aged between 18-29 years through provision of start-up grants and business development services. A total of 32,462 youths received start up business grants amounting to Ksh. 1,349,020,000 thereby creating 64, 926 jobs.

Implementation Challenges

- Inadequate and updated data on MSMEs for planning, decision making and provision of evidence-based policies.
- Lack of financial resources support job and wealth creation through provision of affordable credit for the MSMEs.
- Limited access to market information to help support MSMEs and producers to access the market for their products and services.
- The delay in disbursement of funds slowed down implementation of programmes and projects.
- Lack of land ownership documents in some CIDCs is creating land disputes between MSEA and MSMEs on ownership of the land.

Lessons Learnt

- Partnerships and collaborations are key in supporting programmes and projects in the MSE sector.
- CIDCs can be used as aggregation and value addition centres for MSME products.

Recommendations

- Enhance research activities in the MSE sector to cover existing data gaps.
- Promote entrepreneurship culture among the youth.
- Increase budgetary allocation and timely disbursement of funds to finance key programmes and projects to support the MSE sector.
- Link CIDCs to local material from the constituency for value addition and aggregation.

Refurbished and operationalised Constituency Industrial Development Centre in Bumala

4.2.11. Skills Development and Transformation of the Kenya Industrial Training Institute into a Centre of Excellence

Location: Nakuru County.

Objective: To train the workforce on industrial skills and improve labour productivity.

Implementing Agencies: Ministry of Investments, Trade and Industry, and Kenya Industrial Training Institute (KITI).

Project Progress: The construction of infrastructure facilities to facilitate industrial training (hostel, central stores, walkways, workshops) at KITI was 32.3 percent complete. KITI also trained 3,500 students in industrial and entrepreneurship skills.

Implementation Challenge

- Inadequate budgetary allocation for training youth and industrial workers and for completion of training infrastructure facilities.

Recommendation

- Provide adequate resources for training and completion of the infrastructure facilities.

Infrastructure facilities at the Kenya Industrial Training Institute

4.2.12. Natural Products Industry Initiative

Location: Nationwide

Objective: To harness a vibrant natural products industry premised on the concept of adoption of indigenous knowledge systems to drive market-oriented innovations in Kenya thereby leading to opening of a new sub-sector of the economy.

Implementing Agencies: Ministry of Sports, Culture and Heritage, and National Museums of Kenya.

Project Progress:

a) African Indigenous Vegetables and Aloe Commercialisation Projects

During the review period, a feasibility study was undertaken on commercialisation of African Indigenous Vegetables (AIVs) and Aloe in Kenya. The feasibility studies indicated that both AIV and Aloe were commercially viable projects.

A total of 15,416 farmers were identified, recruited, trained, and supplied with high quality certified AIV seeds in eight counties. On aloe commercialisation activities, NPI identified 13 community-based women groups in Samburu and connected them with a UK based NGO called LUSH for the exports of Aloe leaves, sap and gel providing a crucial market.

b) Scientific validation of a natural contraceptive (Abrus precatorius - Mturi turi seed) based on the indigenous knowledge of the Waatha Community of Kilifi County

Negotiations were done and a Prior Informed Consent agreement signed to allow access for the IK and associated natural contraceptive used by *Waatha* women of reproductive age for scientific validation. A baboon animal model *(Papio anubis)* was developed for pre-clinical testing and results indicated that 60 percent of the animals tested did not conceive. The test is undergoing optimisation to increase the effectiveness of the contraceptive.

c) The utility of natural health products as an immune booster/ anti-inflammatory agent in the management of COVID-19 and other upper respiratory infections

Purchased 57 herbal products from eight counties for scientific validation as possible remedies for the pandemic. The scientific validation is currently ongoing at the Kenya Institute of Primate Research.

Implementation Challenges

- Delayed adoption of the Draft Natural Products Industry Policy.
- Inadequate budgetary allocation.

- Inadequate documentation and digitisation of data on indigenous knowledge systems.
- Weak protection of associated intellectual property rights.
- Limited ability to access international markets for local products.
- Limited value addition activities associated with indigenous knowledge assets.

Lessons Learnt

- While the COVID-19 pandemic significantly led to budget re-adjustments, the NPI flagship project has continued to benefit from resource reallocation to support targeted research on utility of natural health products in boosting immune responses against the pandemic.
- County Governments are receptive to new initiatives which have the potential to contribute to their socio-economic development.

Recommendations

- Fast-track the approval of Draft Natural Products Industry Policy.
- Increase budgetary allocation.
- Enhance documentation and digitisation of indigenous knowledge.
- Enhance natural products development initiatives (standards, marketing value addition, trademarks and intellectual property rights).

4.2.13. Agro-Food Processing Programme

a) Mango Value Chain

Location: Elgeyo Marakwet, West Pokot and Baringo Counties.

Objective: To promote mango production, build capacity of farmers and establish a mango processing plant for value addition.

Implementing Agencies: Ministry of EAC, the ASALs and Regional Development, and KVDA.

Project Progress: KVDA established a mango processing plant for value addition in Tot, Elgeyo Marakwet County. The plant is currently processing mango fruits into mango juice/puree. During the review period, the Authority raised and planted one million mango seedlings in the region; operationalised Tot mango factory; processed 20,000 litres of mango juice; and trained 1,000 mango farmers on modern farming methods.

Implementation Challenges

- Inadequate budgetary allocation to support mango production and automation of the mango processing plant.
- Incidences of insecurity between neighbouring communities.
- Seasonality of mango production.
- Inadequate storage facility at Tot Factory.

Recommendations

- Provide adequate resources to support mango production.
- Full automation of mango factory and capacity building of mango farmers.
- Establish a storage facility at Tot factory in Elgeyo Marakwet; and
- Promote peaceful co-existence of neighbouring communities by promoting alternative livelihood activities.

KVDA Mango Tree Nursery

KVDA Mango Processing Factory in ToT, Elgeyo Marakwet

b) Oloitokitok Agro-Processing Factory Project

Location: Rombo Town, Kajiado County.

Objective: To improve livelihoods and enhance socio-economic development through establishment of a tomato processing factory for value addition.

Implementing Agencies: Ministry of EAC, the ASALs and Regional Development, and Ewaso Ngiro South Development Authority (ENSDA).

Project Progress: Construction of the tomato processing plant building measuring 100m by 40m (4,000 m2) was at 75 percent completion. This comprised completion of substructure and superstructure including roofing structure.

Implementation Challenge

- Inadequate budgetary allocation.

Lessons Learnt

- A phased approach to project implementation would enable better planning in terms of rolling out benefits to end users and return on investment.
- Partnerships and collaborations with stakeholders are key in supporting the project to quickly realise its objectives.

Recommendations

- Provide adequate resources to support completion of remaining building works - roof covering, finishes, utilities, and installation of a tomato processing line. This will ensure operationalisation of the factory to benefit the tomato farmers with market and tomato related value chain opportunities.

Status of factory building construction as of June 2022

c) Ewaso Ng'iro Tannery & Leather Factory (Cottage Industry)

Location: Ewaso Ng'iro Centre, Narok County.

Objective: To promote the value addition of available raw hides and skins.

Implementing Agencies: Ministry of EAC, the ASALs and Regional Development, and ENSDA.

Project Progress: Establishment of the Ewaso Ng'iro leather tannery was completed with an installed processing capacity of 1.2 million square feet of finished leather per year. The footwear demonstration and production workshop capacity of 100 pairs per day was 100 percent complete.

Implementation Challenges

- Inadequate technical capacity in leather technology.
- Inadequate budgetary allocation.

- Low installed processing capacity.
- Low-quality hides and skins produced in the local abattoirs and poor animal husbandry practices.
- Competition from other uses of raw hides.
- High cost of chemicals which are critical in production.
- Inadequate legal and regulatory frameworks

Lessons Learnt

- A phased approach to project implementation ensures better planning in terms of rolling out benefits to end users or return on investment.
- Partnerships and collaborations with stakeholders are key in supporting the project to quickly realise its objectives.

Recommendations

- Provide support for training and capacity building in leather technology.
- Provide funding to support increased production of finished products for profitability.
- Establish footwear factories and leather cottage industries (to ensure 100 percent utilisation of the finished leather produced by SMEs).
- Provide continuous capacity building and training support for abattoir operators and livestock farmers.
- Regulatory support to address export of raw hides and skins.
- Provide tax relief for leather processing equipment and production chemicals.

Ewaso Ngiro Tannery and Leather Factory: main factory building and semi processed (wetblue) leather as of June 2022

4.3. TOURISM

Tourism is a key economic sector and among the eight top priority sectors identified in the Kenya Vision 2030 for attainment and sustenance of the envisioned 10 percent economic growth. The Sector's goal is to make Kenya *"among the top ten long haul and leading regional tourists' destinations offering a high end, diverse and distinctive visitor experience."* Tourism directly contributes 4.4 percent to Kenya's GDP as per the Tourism Satellite Account 2019.

The Sector registered a recovery in 2021 as manifested in increased domestic tourism and international visitor arrivals. In the year under review, inbound tourism earnings grew to KSh. 146,514,060,000 from KSh. 88,562,000,000 in 2020 representing a 65.44 percent growth. This was attributed to the easing of travel restrictions and rising rates of COVID-19 vaccination. International arrivals expanded by 50.3 percent to 871.3 thousand in 2021, supported by the reopening of Kenya's source markets and relaxation of travel restrictions. Overall, hotel bed-nights occupancy expanded by 45.1 percent to 5.5 million in 2021. Hotel bed-nights occupancy by residents of Kenya rose by 49.2 percent to 3.8 million and accounted for 69.4 percent of the total hotel bed nights occupancy in 2021. This indicates that the tourism sector was majorly supported by domestic tourism in the review period. The number of international conferences held increased from 28 in 2020 to 292 in 2021 while local conferences held increased from 1,176 in 2020 to 8,117 in 2021. The number of visitors to national parks and game reserves increased by 50.0 percent from 1.0 million in 2020 to 1.5 million in 2021. Similarly, the number of visitors to museums, snake parks and historical sites more than doubled to 403.7 thousand during the same period.

The achievements under the various flagship projects are as follows.

4.3.1. Resort Cities

Location: Lamu, Isiolo and Lake Turkana.

Objective: To harness and tap into the rich tourism potential and bolster the viability and sustainability of the LAPSSET Corridor.

Implementing Agency: Ministry of Tourism, Wildlife and Heritage.

Project Progress: On the development of Isiolo, Turkana, and Lamu Resort Cities, a Notice for Intention to Acquire Land was gazetted by NLC and LAPSSET. Isiolo Resort City will cover an approximate area of 5,012 ha and will be located around the area of Kipsing Gap. The Lamu Resort City will be located around Mukowe and will cover an approximate area of 470 ha while Turkana Resort City will be located at Eliye Springs on the shores of Lake Turkana and will cover an approximate area of 5,000 ha. Pre-feasibility studies for the three sites were done in 2011 and there is a need to update the pre-feasibility study reports and conduct feasibility studies.

Currently, resort cities are at planning stages as follows: Integrated Master Planning and Investment Framework for the Lamu Port City encompassing Lamu Port, SEZ, resort city, international Airport, rail & pipelines is complete and approved; Integrated Transport Infrastructure Master Plan approved; development of critical infrastructure of Lamu Port, Lamu – Garsen road, Lamu – Garissa – Isiolo Road are at different stages; construction of Isiolo International Airport and Manda Airport completed to facilitate access and provision of infrastructural services such as water and electricity are ongoing.

Implementation Challenges

- Inadequate funding allocation.
- Weak inter-governmental coordination.
- Communities fear losing their ancestral/ grazing land.
- Insecurity/terrorism threats.

Recommendations

- Increase funding allocation to the State Department for Tourism and Wildlife to facilitate implementation.
- Fast-track the implementation of the national spatial plan and adopt the whole-government-approach for better coordination.
- Sensitise communities about the potential value of the resort cities.
- Enhance security.

4.3.2. Premium Parks Initiative

Location: Lake Nakuru and Amboseli National Parks.

Objective: To improve visitors' experience through enhancement of products, access and upgrading tourism facilities in the high potential parks to ensure visitors get value for their money and contribute more to the economy while ensuring sustainability of these parks.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, and KWS.

Project Progress: To elevate Amboseli National Park to "Must See" status, 226km road network we maintained, 28km of access road (Kimana- Meshanani-Namanga) were rehabilitated, 1.2km airstrip was maintained, all *bandas* and observation points were refurbished, and Tembo Naming Festival launched. Additionally, promotional materials to showcase Amboseli National Park through digital and other media were developed while trade travel training and familiarisation trips for tour consultants and agents as part of promoting the circuit continued. This increased the number of visitors to the park from 55,076 in 2020 to 90,900 in 2021.

Similarly, the number of visitors to Lake Nakuru National Park increased from 55,100 in 2020 to 79,600 in 2021. The flooding in Lake Nakuru National Park continued to affect the development of infrastructure and visitation. As a result, Lake Nakuru National Park is no longer regarded as a premium park, it is now being considered as a Kenya Signature Wildlife Park.

Implementation Challenges

- Inadequate funding for project implementation.
- Lack of budgetary allocation.
- COVID-19 pandemic slowed implementation/completion of set targets.
- Inadequate involvement of the stakeholders.
- Flooding in Lake Nakuru National Park affected the development of infrastructure.

Recommendations

- Provide adequate financing for projects.
- Explore different financing models such as public private partnerships.
- Enhance digital marketing and sustained promotion of local tourism to supplement foreign visitations.
- Deepen stakeholder participation/ community involvement after project conceptualisation and before implementation to promote buy in and successful implementation of the projects.
- Diversify Park activities e.g. introduction of new products such as boat safaris.

4.3.3. Under-Utilised Parks Initiative (Now Kenya Signature Wildlife Park)

Location: All National Parks except Lake Nakuru and Amboseli.

Objective: To improve experience and facilities, increase bed nights and revenue collection.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, and KWS.

Project Progress: A total of 56.5km of fence was rehabilitated, and 43.7km of road constructed while 1,714km road was maintained. This included maintenance of 558km in Tsavo East National Park, 250km in Tsavo West National Park, 100km in Aberdare National Park, 67km in Ruma

National Park, 30km in Mt. Elgon, 70km in Meru National Park, 40km in Shimba Hills, 26km in Marsabit, 48km in Nairobi National Park and rehabilitation of 55km at the Nairobi National Park.

The Taskforce on Wildlife Corridor Connectivity was gazetted to establish permanent wildlife migration corridors between Nairobi National Park and Athi Kapiti plains. The transformation process for Nairobi National Park and the Ecosystem Management Plan for Shimba Hills commenced with the review of the management plan that included development, finalisation and gazettement of the Transformation Master Plan on 8th January 2021. To diversify tourism product offerings, trout fishing, boat safaris and mountain bike circuits were introduced at the Aberdare and Lake Nakuru National Parks.

In addition, a total of 29km airstrips were maintained as follows: 10km Tsavo East National Park, 10km Tsavo West National Park; 2.5km Chyulu Hills National Park; 1.5km Ruma National Park; and 5km Meru National Park. Safety and security features were installed, including repair of gorge walking area and hiking trails at the Hells Gate.

Towards branding and digital marketing activities, content creation for 10 priority parks was undertaken and the Zuru Campaign launched and sustained targeting the domestic market and making seasonal campaign changes as per specific calendar days such as World Wildlife Day, Valentine's Day, Father's Day, Madaraka Day among others. KWS also partnered with various entities such as Kenya Tourism Board to develop content for North Rift Circuit; Canon and Influencers to collect content for Meru National Park and Tsavo West/East National Parks; and Africa 118 in listing all the lesser known KWS parks and reserves in the Google My Business and under. Other partners included Jambojet to showcase destinations with unique KWS parks and reserves; and stakeholders among them the Kenya Tour Driver Guide Association, Kenya Association of Tour Operators and Kenya Professional Safari Guide Association in training and familiarisation trips.

Implementation Challenges

- Partial exchequer releases and austerity measures affected full contract execution.
- The COVID-19 pandemic adversely affected the tourism sector, leading to subsequent tourism revenue decline.
- Changes in land use around the parks hindered development of industry e.g., conversion of lands around parks from grazing to farming affected the movement of animals.

Lessons Learnt

- Adequate funding is critical for successful implementation of capital development projects.
- Stakeholders' involvement and public participation is necessary for successful implementation of projects.

Recommendations

- Enhance digital marketing and sustained promotion of local tourism to supplement foreign visitations.
- Sustain domestic market campaign targeting signature parks.
- Partnership with stakeholders on development of new products e.g., air balloon, bunjee jumping, zip lining among others. This will attract a new specific niche of customers to the parks which KWS alone is not able to reach.
- National/County Government collaboration to develop suitable land use policies favourable to conservation & tourism especially relating to lands around parks.

4.3.4. Development of Coastal Beach Tourism

Location: Mombasa, Kilifi, Kwale and Lamu Counties.

Objective: To improve beach products and enhance priority beach nodes (popular beach areas).

Implementing Agency: Ministry of Tourism, Wildlife and Heritage.

Project Progress: The renovation of the Mama Ngina Waterfront was completed and handed over to the Ministry on 25th March 2021 while the development of Bamburi Beach Operators Market in Mombasa County was initiated.

Implementation Challenges

- Environmental concerns such as pollution and land use conflict affected the overall attractiveness of the project.
- The funds allocated to the project were re-allocated to a different project.
- Uncoordinated implementation framework between County Governments and the implementing agencies.

Recommendations

- Strengthen the coordination between the two levels of government.
- Undertake proper Environmental Impact Assessment (EIA).
- Provide adequate budgetary allocation.

4.3.5. Destination Marketing Programme

Location: Nationwide

Objective: To increase tourist arrivals and tourism sector earnings.

Implementing Agency: Kenya Tourism Board

Project Progress: The progress on marketing interventions is detailed hereunder:

Tourism promotion and marketing: Tourism Promotion and Marketing: The Tourism Recovery Summit was held in Nairobi on 17th July 2021. The high-level summit focused on new ways of rebuilding the African tourism sector as well as strengthening partnerships between African countries and the Kingdom of Saudi Arabia.

Development and promotion of a portfolio of top, signature, and quality assurance experiences: On the development and promotion of top signature portfolio, the sector came up with the Magical Kenya Signature Experience Programme which has so far enlisted 44 experiences in the collection. On quality assurance experiences, the sector assisted five counties namely, Lamu, Marsabit, Kilifi, Kisumu and Bomet to develop content for marketing.

Develop and deploy a 360-degree communication and Digital Marketing Programme: Developed a Recovery Communication Campaign to guide the implementation of the communication strategy for the international tourist for the Kenya destination. 'The real deal campaign' rolled out digital marketing in all markets.

Industry engagement programme and Customer Relationship Management: The sector set up a customer relation management system (Sherpa) with over 16,000 users from the tourism sector, media and consumers. The customer relationship management integrated other aspects like Canto which holds a collection of images and videos as user-generated content for marketing. The database consists of 13,926 consumers, 2,631 tourism players and 428 media. Further, the sector established a global e-Learning programme which has so far signed in over 4,500 agents.

Implementation Challenges

- Narrow product range, namely beach and safari holidays hampered growth.
- Impact of COVID-19 pandemic restrictions.
- Inconsistent funding.
- Weak industry associations and low brand conversion.

Recommendations

- Position and communicate the diversity of the Kenyan destination experience through signature experience mapping.
- Build Magical Kenya affinity with prospective visitors. This includes themed materials focusing on priority products.
- Provide adequate funding.

4.3.6. Niche Products Development and Diversification

Location: Nationwide

Objective: To diversify tourism products offering to scale up tourist arrivals in all regions of the country with a view to boosting rural income and living standards.

Projects under Niche Product Development and Diversification include:

a) Business and Conference Tourism Initiative

Location: Kenyatta International Convention Centre (KICC), Bomas of Kenya, Kisumu and Mombasa.

Objective: To market Kenya as a conference tourism destination in the region and continent and attract more business visitors by attracting high-end international hotel chains and investing in new conference facilities.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, KICC, Tourism Finance Corporation, and Bomas of Kenya.

Project Progress: Modernisation and expansion of KICC commenced and was 34.4 percent complete as of December 2021. The implementation of the project was planned in phases. Phase I was completed and included a solar project towards clean and sustainable energy. The refurbishment of the Courtyard and Driveway and rehabilitation of the KICC Amphitheatre roof commenced.

The proposed Nairobi International Convention Centre being undertaken by the Bomas of Kenya was 10 percent complete. A transaction advisor was engaged, feasibility study undertaken and submitted to the Public Private Partnership Directorate of the National Treasury for approval. The Ministry of Tourism and Wildlife together with Bomas of Kenya and the PPP Directorate initiated re-evaluation of the project and updating of the feasibility study to address the challenges faced and appraise its current market viability, with a view of fast-tracking the project in readiness for project procurement. Furthermore, phased rehabilitation of the Bomas of Kenya Main Auditorium Hall commenced during the period under review. Phase 1 of the project which entailed roofing, electrical, ablution block, Very Important Persons' section was 73 percent complete.

Implementation Challenges

- Inadequate funding allocation for development projects.
- Bureaucratic government procedures.

Recommendations

- Explore alternative financing models/ arrangements.

- Establish a multi-agency project implementation committee.

b) Events Strategy

Location: Nationwide

Objective: To consolidate all events across the country and establish a single calendar of events.

Implementing Agencies: Ministry of Tourism and Wildlife, and Kenya Tourism Board.

Project Progress: The events strategy was developed and approved in December 2020. In addition, the events strategy calendar budget of KSh.10 million was made available for commencement of digital advertising.

c) Cultural and Heritage Tourism

Location: Nationwide

i) Cultural Tourism

Objective: To enhance cultural tourism experience.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, and Bomas of Kenya.

Project Progress: A memorandum of understanding (MoU) was signed with a Swedish innovation company, Libido Music AB to develop the Sample Bar Kenya Project to document and exhibit traditional Kenyan musical instruments that were facing extinction. The project relies on a Swedish innovation, a digital technology product, to uniquely archive and safeguard sounds and melodies of the diversity of Kenyan traditional music. Through the support of Ignite Africa Fund, the documentation and research has been undertaken for three regions, namely, Central, Western Kenya and Eastern Kenya Regions.

The sector integrated and promoted storytelling through an online programme called 'Chapa Story'. Chapa Story preserves and promotes the different aspects of Kenya's cultural heritage with an emphasis on traditional tales, myths and legends, vernacular languages as well as traditional dances. In addition, an online educational programme called 'Dance Nasi' was initiated to preserve and promote the diverse traditional dances of Kenya. The sector also developed a Memorandum of Understanding between Bomas of Kenya and Africa Digital Heritage in view of digitising all cultural products and services for safeguarding and ensuring broader consumption of cultural heritage products. Further, the sector initiated the development of the Sample Bar Kenya Project which is an interactive ethno-musicological system for preserving and showcasing Kenya's cultural heritage through digitised music recordings.

Further, a Memorandum of Understanding between the Bomas of Kenya and Africa Digital Heritage was developed. The MoU sought to digitise all cultural products with a view of safeguarding Kenya's cultural heritage to ensure broader consumption of cultural heritage products. Mobilisation of funds was undertaken by forwarding a proposal to the Tourism Promotion Board.

Implementation Challenge

- Reduced National Government funding since culture is a devolved function.

Recommendation

- Explore alternative financing models.

ii) Heritage Tourism

Programme Progress:

Uploading Virtual Tours of Digitised Sites: The National Museums of Kenya partnered with Google to launch a digitised site "Google arts and culture – Utamaduni

Wetu" which is a digital exhibition that celebrates Kenya's history and culture by honouring heroes and heroines from all the 44 Kenyan communities. 11 out of the 34 museums and sites in Kenya have been digitised.

Revamping Key Museums and Historical Sites: This was implemented under 'Adopt a museum' Strategy whereby the National Museums of Kenya partnered with 'Museum Patrons' in the refurbishment of museum sites. Key museums and historical sites rehabilitated under the strategy included: Karen Blixen, Ollorgasaillie, Nairobi National Museum, Fort Jesus, and Kariandusi Prehistoric Site.

Enhancing Awareness on Heritage Sites and Products: Key stakeholders such as hotels, colleges, tour companies and tour guides associations were sensitised on mapped out cultural and historical circuits in the Coast, Nairobi, and Western regions. In addition, an ecotourism guide was developed.

101 Best Monuments Programme: The selection of two monuments per county based on public perception ratings commenced and the selected monuments would be marketed and promoted as tourism niche products alongside the seven United Nations Educational, Scientific and Cultural Organization's World Heritage Sites.

Fort Jesus Sea Wall Project: The construction of the Fort Jesus Sea Wall Project under heritage tourism was 97 percent complete. The pending works entail construction of a public ablution block, spreading of a football artificial playing turf and minor landscaping.

Rally Championship: Additionally, the Federation Internationale de l 'Automobile World Rally Championship was held from 23rd to 26th June 2022, following the successful reinstating of the world rally championship calendar in Kenya.

4.3.7. Maasai Mara National Reserve

Location: Maasai Mara Game Reserve, Narok County.

Objective: To develop and market the Maasai Mara as a national iconic brand.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, KWS, and Narok County Government.

Project Progress: Developed and launched Greater Maasai Mara Ecosystem Management Plan which aims at providing a roadmap for integration of wildlife conservation, as a land use method across the Greater Maasai Mara ecosystem. The Plan comprises seven thematic areas that focus on wildlife protection, natural resource preservation, land use, opening of wildlife corridors and other sustainable conservation measures. It identifies the key conservation and development goals to be achieved over the next 20 years to sustain the ecosystem's ecological integrity and development needs of the communities.

4.3.8. Tourism Training and Capacity Building

a) Construction of Ronald Ngala Utalii College

Location: Kilifi County

Objective: To expand opportunity and access for training and improve skilled manpower development for the tourism sector and hospitality industry.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, and Tourism Fund.

Project Progress: Construction of the Ronald Ngala Utalii College continued and was 76 percent complete.

Implementation Challenges

- Delayed and often untimely remittance of funds from the GoK funding portfolio for the project.
- Penalties and interests arising from project delays, idle plant and chargeable interests on contract terms.

Recommendations

- Timely disbursement of allocated funds to avoid penalties and interest.
- The Tourism Fund should renegotiate and reschedule payments to contractors.
- The Tourism Fund should negotiate with contractors to stay on surcharges and interests accrued due to project delays and idle plant charges.
- The Tourism Fund should include and involve contractors only the project components of secured funds.

b) Construction of the Practical Training Kitchen in Kenya Utalii College

Location: Kenya Utalii College, Nairobi.

Objective: To expand opportunity and access for training and improve skilled manpower development for the tourism and hospitality industry.

Implementing Agencies: Ministry of Tourism, Wildlife and Heritage, Kenya Utalii College, and Tourism Fund.

Project Progress: The number of graduates on hospitality and tourism courses at the Kenya Utalii College stood at 708 in 2022. Construction of the Practical Training Laboratory (scaled down to Individual Training Kitchen only) at Kenya Utalii College was at 85 percent completion level.

Implementation Challenge

- Financial challenges owing to poor performance on internally generated revenue from satellite campuses, Utalii and other commercial activities.

Recommendations

- Strive to achieve financial sustainability and operational efficiency by channelling most of its financial resources towards development and the core mandate of the institution.
- Review of curricula and upgrading of the College's programmes to attract more numbers to address, among others, certificate courses that take 1.5 years to complete, hence discouraging applicants.
- Review of the fee structure in consultation with the Government to bring it up to realistic figures in comparison with other hospitality schools.

c) Assessment of the Impact of the 9th Edition of Africities Summit on the Sector and the Country's economy

Location: Kisumu

Objective: To inform the Government and private sector on the economic value of holding such events and diversify tourism products in particular business tourism commonly referred to as Meetings Incentives, Conferences and Exhibitions (MICE).

Implementing Agency: Tourism Research Institute.

Project Progress: The project is 100 percent complete. The Institute undertook a study in May 2022 on the impact of the 9th Edition of AfriCities Summit on the sector and the country's economy. The study was digitally administered through questionnaires to domestic and international tourists, participants, exhibitors, sponsors among others. The objective of the study was to assess and document the impact of the 9th Edition of Africities Summit Kenya 2022 on Kenya's tourism sector and the economy. Analysis and report writing will be finalised in 2022/23.

Implementation Challenges

- Complexity impact. Determining the conference outcomes such as long-term policy changes or economic development can be complex and require sophisticated evaluation methods.
- Diverse stakeholder perspectives: Different stakeholders had conflicting views on what constituted value, making it challenging to develop a comprehensive evaluation framework.
- Inadequate human resources at Tourism Research Institute.

Lesson Learnt

- Planning for evaluation during the conference needs to start early. It should identify key metrics during the conference planning stages, collection methods and resources needed for assessment.

Recommendation

- The evaluation to assess long term impact on communities' industry and policy outcomes should be conducted. This may require follow-up studies and tracking overtime.

d) Assessment of COVID-19 Impact on Kenya's Tourism

Location: Nationwide

Objective: Assessing the Impact of COVID-19 on Kenya's Tourism and the Multiplier Effects on the Country's Economy.

Implementing Agency: Tourism Research Institute.

Project Progress: This study estimated and quantified the overall effects of COVID-19 since it was reported in the country on Kenya's tourism industry and the resultant impacts on the country's economy. The common multipliers computed were associated with output, income, value addition and employment in the economy for the entire period.

Implementation Challenge

- The long-term effects of the pandemic on tourism demand, infrastructure and consumer behaviour remained uncertain, making it challenging to accurately measure the effects of COVID-19.

Lesson Learnt

- While the immediate impacts are significant, measuring the long-term effects of COVID-19 is equally important for understanding the lasting consequences on health, economy and societies.

Recommendation

The Tourism Research Institute should invest in robust data collection, sharing and analysis capabilities to ensure timely access to accurate and reliable information during a health crisis. This includes strengthening surveillance systems and leveraging emerging technologies such as artificial intelligence and machine learning for real time monitoring.

4.4. TRADE

The Kenya Vision 2030 aims to transform the Trade Sector into a formal, efficient, multi-tiered, diversified in product range and innovation. The Sector is poised to be one of the key sectors in the economic development of the country through its backward and forward linkages across all sectors of the economy. This is mainly because the Sector acts as the main link between production and consumption which are the two main drivers in stimulating economic growth, development, employment and wealth creation of a country.

The Sector is also key in the realisation of Vision 2030 priorities by ensuring that linkages between the agriculture, manufacturing sectors and trade are sustained. Trade facilitation ensures markets are identified and accessed for manufactured goods and contributes greatly to job creation in the formal and informal sectors. The following were the achievements under each flagship project in the Sector:

In 2021/22, the contribution of retail and wholesale trade to GDP was 7.9 percent down from 8.1 percent in 2020/21. The decline was due to reduced production of agricultural products caused by drought. The value of exports increased from KSh. 643.7 billion in 2021 to KSh. 743.7 billion in 2022. This increase is attributed to the implementation of export strategies and AGOA. The value of wholesale and retail trade increased from KSh. 727.7 billion to KSh. 786.2 billion.

4.4.1. Building Tier-one Markets

Location: Athi-River, Machakos County.

Objective: To improve supply chain efficiency in the retail sector.

Implementing Agencies: Ministry of Industrialization, Trade and Enterprise Development, and Machakos County Government.

Project Progress: This project was anticipated to serve as a model for counties and the private sector. However, no progress was made during the review period since the project has not been allocated funds since Financial Year 2014/15 hence stalled.

Implementation Challenge

- No budgetary allocation to enable implementation of projects.

Lessons Learnt

- Stakeholder involvement is key in project identification and implementation to promote necessary support and actualise intended outcomes.
- Monitoring and evaluation are key in identifying project challenges and taking appropriate action in time to ensure effective implementation.
- Need to plan for exogenous shocks that may disrupt project implementation.
- Need to start the procurement process as soon as project funds have been received.

Recommendations

- Provide adequate funding for the projects.
- Pursuing Public Private Partnerships for project implementation.

4.4.2. Development of Wholesale Hubs

Location: Maragua, Murang'a County.

Objective: To improve supply chain efficiency in the wholesale sector.

Implementing Agencies: Ministry of Trade, Investments and Industry, and Murang'a County Government.

Project Progress: Construction of the pilot wholesale hub in Maragua was anticipated to serve as a model for counties and the private sector. No progress was made during the review period since the project was last funded in the Financial Year 2014/15 and has stalled.

Implementation Challenge

- No budgetary allocation to enable implementation of projects.

Lessons Learnt

- Stakeholder involvement is key in project identification and implementation to promote necessary support and actualise intended outcomes.
- Monitoring and evaluation are key in identifying project challenges and taking appropriate action in time to ensure effective implementation.
- Need to plan for exogenous shocks that may disrupt project implementation.
- Need to start the procurement process as soon as projects funds have been received.

Recommendations

- Provide adequate funding for the projects.
- Pursuing Public Private Partnerships for project implementation.

4.4.3. Export Credit Guarantee Scheme/ Export Development Fund

Location: Nationwide

Objective: To unlock the credit potential in the export sector by creating a facility to provide guarantees to exporters of Kenyan goods and services.

Implementing Agencies: Ministry of Trade, Investments and Industry, and Kenya Export Promotion and Branding.

Project Progress: The project involves undertaking feasibility study, development of a legal and institutional framework, finalisation, and operationalisation of the Export Development Fund. During the review period, no progress was made because the project was not funded. However, a concept note is already in place.

Implementation Challenges

- Inadequate funding to operationalise the credit guarantee scheme.
- Inadequate funding for the institutions under the trade sector to execute their mandates.

Lesson Learnt

- Timely disbursement of funds is critical in delivery of planned programmes/ projects.

Recommendations

- Enhance budgetary allocation to operationalise credit guarantee scheme.
- Enhance budgetary allocation to finance programmes/projects to support MSMEs sector.

4.4.4. Establishment of Kenya National Multi-Commodities Exchange

Location: Nationwide

Objective: To provide structured trading for agricultural and non-agricultural commodities.

Implementing Agency: Ministry of Trade, Investments and Industry.

Project Progress: During the review period, Capital Market (Commodities Market) Regulations 2020 were gazetted and implemented, and farmers and cooperative societies were sensitised on the commodities exchange. Capitalisation of the Company was on-going. In addition, a Miscellaneous Amendment Bill was deposited with the Office of the Attorney General awaiting further action. In addition, the percentage of operationalisation stood at 12 percent against 100 percent. The variance was attributed to delayed capitalisation process and subsequent acquisition of exchange technology suite.

Implementation Challenges

- Low awareness on opportunities available to farmers through the Kenya National Multi-Commodities Echange (KOMEX).
- Limited seed capital for operationalisation of KOMEX.

Recommendations

- Sensitise farmers on KOMEX and its available opportunities; and
- The government should engage private sector investors, farmers, and co-operatives to provide seed capital for operationalisation of KOMEX.

4.4.5. Second Generation Single Window System Implementation/ National Electronic Single Window System

Location: Nationwide

Objective: To facilitate trade through electronic management of trade documentation.

Implementing Agency: Kenya Trade Network Agency.

Project Progress: Implementation of the National Electronic Single Window (NESW) was finalised and value-added products and services were introduced. The NESW system was also upgraded from the TradeNet System to Trade Facilitation Platform, which was commissioned on August 20th, 2021, is more user friendly and efficient in electronic management of trade.

The system has fully integrated with the KRA's Integrated Customs Management System and the new Kenya Bureau of Standards Integrated Management System. This has enabled the country to achieve full automation of the cargo release process. Further, NESW performance has been enhanced by deploying an Application Performance Monitoring tool that is able to predict and prevent performance issues before they impact the system users.

Additional achievements realised during the period include onboarding of 43 stakeholder institutions into the NESW, 35 of which are permit issuing while 8 are non-permit issuing, processing of a total of 1,057,090 permits through the system; processing a total of KSh.1.5 trillion worth of imports and KSh.581 billion worth of exports and collections amounting to KSh.2,310 billion through the system by Government agencies using available payment gateways.

Implementation Challenges

- Resistance to change by some of the industry stakeholders is slowing down the pace.
- Inadequate financial resources hamper the execution of some planned activities.
- High cost of ownership of the ICT systems require a lot of resources.
- Evolving cyber security threats.
- Data protection and privacy requirements.

Lessons Learnt

- Engaging all stakeholders prior to the introduction of new processes, products and/service is necessary for successful implementation.

- Leveraging technology is critical to mitigate against the impacts of pandemics.
- A robust resource mobilisation function within the Agency is important to foster collaborations and partnerships.

Recommendations

- Increase budgetary allocation for the implementation and operationalisation of the system to ensure early adoption of emerging technology.
- Enhance financial sustainability, charging reasonable fees for the NESWS services to enable the Agency to fund some of the system requirements without over-reliance on the exchequer.
- Engage all stakeholders in international trade through sensitisation for adoption of the system 100 percent and ensure that their data reflects the actual trade volumes in the country.

4.4.6. Establishment of World Trade Centre and International Exhibition and Convention Centre

Location: Nationwide

Objective: To access a global database of businesses and to attract international businesses to Kenya.

Implementing Agencies: Ministry of Trade, Investments and Industry, Kenya Export Promotion and Branding Agency, Agricultural Society of Kenya, Ministry of Agriculture and Livestock Development, and National Treasury.

Project Progress: The project concept note has been developed but not yet implemented.

Implementation Challenges

- The conceptual designs changed to accommodate participation of the private sector.
- Project approval delays occasioned by differences in conceptual framework – "Brick and Mortar Institution" – Construction of the Centre and the systems for the Centre vis-a-vis "Processes based Facilitation Institution".
- Lack of budgetary support to implement the project.

Recommendations

- The Government should fund the project or negotiate for PPP funding with the private sector, foreign investors and individual investors.
- The project can be implemented in collaboration with the County Government of Nairobi.

4.5. BUSINESS PROCESSES OUTSOURCING/ IT ENABLED SERVICES

The Kenya Vision 2030 identifies BPO as a key sector under the Economic Pillar since it plays a big role in the growth and development of a knowledge-based economy, opening a window for thousands of jobs to the youth in the country. The BPO continues to be a key enabler of growth across most sectors of the economy as economic agents leverage the availability of technologies to grow their businesses and maximise returns.

It encompasses a range of opportunities that include customer service work, data entry, transcription, digitisation, financial accounting, auditing, and other higher value-knowledge processing such as content development, animation, legal services, engineering design, and data analytics. With the global telecommunications infrastructure now well established and consistently reliable at Konza Technopolis, the BPO industry is expected to help Kenya realise its development goals.

The BPO/ITES involves the transfer of value contributing activities and processes to another firm to reduce the operating costs for better quality and focus on core competences. The growth in the global business outsourcing industry offers a clear opportunity for Kenya to exploit ITES. The BPO Sector expects to create over 200,000 direct jobs and contribute towards the achievement of the ICT sector target of 10 percent GDP. So far, the Government and other stakeholders in the Sector have implemented various initiatives that have enabled the BPO/ ITES to contribute significantly towards the ICT overall contribution to GDP from 1.4 percent in 2017 to 2.4 percent in 2022.

The following were the achievements under the flagship projects and programmes in this Sector.

4.5.1. Konza Technopolis

Location: Machakos, Makueni and Kajiado Counties.

Objective: To develop a smart sustainable city and an innovation ecosystem contributing to Kenya's knowledge-based economy.

Implementing Agencies: Ministry of ICT, and Konza Technopolis Development Authority.

Project Progress: Konza Technopolis is a smart city and a Kenya Vision 2030 flagship project. It is anchored in the Economic and Macro Pillar of the Vision, under the BPO Sector. Technopolis is a fundamental public and social infrastructure which aims to transform our society through better quality of life, improved connectivity and mobility, new opportunities, better sustainable living spaces, economic growth and human development.

It is being developed into a globally competitive smart city by creating an enabling environment through utilisation of ICT for socio-economic development. Technopolis aims to contribute 2 percent of national income (GDP), create 17,000 jobs and accommodate 30,000 residents in Phase I and over 240,000 residents at full buildout.

Phase 1 of Konza Technopolis, which is at advanced levels of completion brings about reliable and redundant utilities, improved Intelligent Transport Systems, efficient Water and Sanitation Networks as well as providing.

a) Konza National Data Centre and Smart City Facilities

The project has two broad components, namely the National Data Centre and the Smart City Facilities. The National Data Centre supports nationally all IT dependent applications, processes and technologies from the public sector, private sector and enterprises. It provides backbone digital infrastructure for the Digital Superhighway, ITS and ITES. It has capabilities for Software as a Service, Platform as a Service, Networking and Colocation Services. The Data Centre project is ongoing with 82 percent completion

Konza National Data Centre

Horizontal Infrastructure

The Horizontal Infrastructure for Konza Technopolis is implemented through Engineering, Procurement, Construction with Finance (EPC-F) model. The scope of the project entails construction of Phase 1 Streetscapes, Water Reclamation Facility, Water Distribution and Treatment Plant, Sewage Collection and Treatment Plant, Storm Water Network, Electrical/ Telecommunication Networks and Electrical Substations, Landscaping of Streets and Parks, Welcome Centre, Public Safety Centre comprising of Police Station and Fire Station, Utility Tunnels, Solid Waste Handling Facility and the Transit Hub. The project was implemented to 83 percent completion.

b) Konza Complex Project

The project comprises three components, namely the Konza Office Block *(which is complete and occupied),* the Konza Hotel Block *(which is at feasibility study stage)* and the Konza Conference Facility whose construction is ongoing. The eight-storey office block hosts the Konza Technopolis headquarters while the Hotel Block together with the ongoing Conference facility will enable MICE and conventional tourism in the city.

The Hotel enables the presence of an internationally renowned Hotel Brand at Konza Technopolis for the provision of hospitality and recreational services. The feasibility study for the Hotel commenced and will inform the planning and design works. Resource mobilisation for the Hotel is ongoing with proposed funding models of private-public partnerships, development partners and the private sector.

Konza Complex under construction.

c) Konza Investors Outreach Programme

The Authority engaged investors through investor-centric programmes, conferences and meetings. New investors were onboarded to the Technopolis and over 70 percent of Phase I sold out. The investors are expected to commence development of their parcels.

d) Creative Economy Initiatives

The Authority commenced planning for the establishment of the Digital Media City (DMC) project, which is a city within and sits on 65 hectares. The DMC will establish a vibrant ecosystem for creation, adaptation and application of knowledge in the creative and content industry. The project is implemented by the Government of Kenya with the support of the Government of South Korea. The beneficiaries of this project will include players in the Creative Sector, the Content Creators, and the Media and Entertainment industries.

The project entails the design, construction, equipping and commissioning of the following:

i. **Anchor Building Complex** comprises:

- **Content Support Centre,** i.e., Studios, Control Rooms and Facilities for studio post-production operation and site management spaces.
- International Business Centre i.e., Administration Offices, Auditorium and Conference Hall for Filming, Gaming and Software Development.
- Cultural Centre i.e., Talent Incubation Units, Exhibition Hall, Retail Area and Social Amenities.

ii. **DMC Infrastructure** which comprises Water and Wastewater Reticulation and Treatment Facility, Electrical Networks, Telecommunication and ICT Facilities, Streetscapes and Smart City solutions.

e) Konza Greening Initiative

The initiative was established to ensure Konza Technopolis meets its environmental sustainability objectives and plays a part in the mitigation of climate change. The journey towards "A 10 million Automated Smart Tree Nursery" was commenced by establishment of the Nursery on a 50-acre parcel. The nursery produces assorted indigenous and exotic tree seedlings, grasses, flowers and shrubs that are used to green Konza Technopolis and its environs.

Implementation Challenges

- Insufficient budgetary allocation.
- Understaffing.
- Unreliable water supply.
- Unreliable bulk power supply.
- Lack of legal framework related to a smart city.

Lesson Learnt

- There is a need to have laws or legal instruments on smart city for the Konza Technopolis and future smart cities to be developed in Kenya. The law will provide for the following areas which require legislation: planning, development control and governance; licensing to operate in the smart cities; complaint procedures and general enforcement; and levying of fees, costs, levies and any other charges.
- Development of high-end innovative leaders amongst the youth will accelerate digitisation and digital economy, enhancing impacts of smart cities in Kenya.

Recommendations

- Prioritise alternative resource mobilisation streams like PPPs, grants and donor funding.
- Implement the approved Human Resource Recruitment Plan.
- Establish a dedicated water supply line from the source to Konza Technopolis.
- Collaborate with KETRACO for the timely completion and operationalisation of the Konza Substation.

4.5.2. Presidential Digital Talent Programme

Location: Nationwide

Objective: To develop a critical pool of local high-end skills personnel to meet the needs of industry and the entire economy.

Implementing Agencies: Ministry of ICT, Innovation and Youth Affairs, and ICT Authority.

Project Progress: The programme entails capacity building within the Government and private sector in ICT technical and management skills and enables the Government to meet service delivery objectives for the public. The programme offers participants an environment in which they can understand Government services and provide them with an opportunity to contribute towards improving service delivery to citizens. During the review period, 400 interns were recruited and deployed to MCDAs. The programme has cumulatively recruited and trained 2,100 interns and deployed them to various MCDAs. Out of these, 850 have acquired employment in the public, private sector, and NGO firms while others have become entrepreneurs employing other youths. The programme also deployed key innovations to support Government accelerated service delivery such as e.g. DamuSasa deployed in over 130 hospitals. In addition, the programme has scaled up its placement to all ministries and state departments attached for about nine months to enhance public services through leveraging ICT.

Implementation Challenges

- Inadequate budgetary allocation.
- Inadequate support for research and development.

Lessons Learnt

- Development of high-end innovative leaders amongst the youth will accelerate digitisation and knowledge economy.
- The programme is critical in the development of ICT technical capacity in Government for a pipeline of future talent both at National and County levels to drive change in service delivery models.

Recommendations

- Match budgetary allocations with the programme plans.
- Strengthening the Public Private Partnerships to reduce dependence on Government funding.
- Deploy additional ICT technical staff at the County level for smooth management of infrastructure needs.
- Collaboration among different stakeholders to ensure successful implementation of the programme.

4.6. FINANCIAL SERVICES

The main objective of the Financial Services Sector is to establish a vibrant and globally competitive financial sector, driving high levels of savings to finance the country's investment needs. This is in line with the Economic Pillar whose goal is to achieve and sustain an average GDP growth rate of 10 percent per annum. The Sector includes banking, insurance, capital markets, pension funds, and SACCOs.

The Sector's contribution to the country's GDP increased from 7.2 percent in 2021 to 7.6 percent in 2022. The gross national savings as a percentage of GDP increased from 6.9 percent to 15.1 percent. In response, CBK maintained the CBR at 7.0 percent in 2021. This increase may be attributed to the adoption of mobile-based financial services. The annual average inflation rate rose from 6.1 percent in 2021 to 7.7 percent in 2022. This rise in inflation was a result of the food supply chain challenges because of prolonged drought and international macroeconomic shocks resulting from COVID-19 pandemic, oil crises and Russia-Ukraine war. The above reasons may also explain the reduction in market capitalisation, and equity turnover. Table 4.1 presents the Sector performance for the FY 2020/21 and 2021/22.

Table 4.1: Financial Sector Performance

S/No.	Financial Services	Performance (KSh Billions)	
		2020/21	2021/22
	Market capitalisation	2,702.22	1,939.21
	Equity Turnover	135.16	121.78
	Domestic credit to the private sector	5,070.39	5,898.32
	Banking assets (net)	5,679.99	6,249.7
	Domestic credit to Government	3,697.09	4,329.07

Source: CBK/Capital Markets Authority (CMA)

The achievements in the financial services flagship programmes and projects are as presented below:

4.6.1. Nairobi International Financial Centre

Location: Nairobi

Objective: To develop Kenya into a globally competitive International Financial Centre.

Implementing Agencies: The National Treasury, and Nairobi International Financial Centre Authority.

Project Progress: The Nairobi International Financial Centre Authority (NIFC) Authority Board was appointed in August 2020; an interim management team including an Acting Chief Executive Officer was appointed in February 2021; and a three-year strategy & business plan and operational documents developed were approved. In addition, NIFC General Regulations were enacted and approved by Parliament; and Initial Tax NIFC incentives enacted.

Implementation Challenges

- Inadequate resources at NIFC Authority limiting carrying out of the mandate.
- Long process and delays in enactment of relevant regulations and related legal instruments affecting speed of responsiveness.

Lesson Learnt

- Engagement with stakeholders shows Nairobi has potential to be the hub of the Sub-Saharan Africa region, subject to making the improvements necessary to enable firms to operate efficiently from Nairobi.

Recommendations

- Provide adequate budgetary allocations to ensure the NIFC Authority is sufficiently resourced to adequately execute its mandate.
- The Government needs to provide the NIFC with appropriate competitive incentives (for example, competitive tax rates for firms financing large transactions), and also review the performance of NIFC.
- Revise and enhance process approval needed for enactment of necessary regulations to ensure faster responsiveness in the financial industry.

4.6.2. Deepening of Capital Markets

Location: Nationwide

Objective: To strengthen capital markets as a major source of funding for infrastructural projects and private sector investment.

Implementing Agencies: The National Treasury, and CMA.

Project Progress: The Capital Markets (Whistleblower) Regulations, 2022 were gazetted to promote investor protection and confidence in the capital markets by encouraging CMA licensees and listed companies to comply with the CMA Act and Regulations. Further, CMA granted Nairobi Securities Exchange approval to roll out Day Trading to enhance liquidity at the bourse by enabling investors to make several trades in a day with the potential to make a profit from price changes.

Implementation Challenges

- Impact of COVID-19, difficult macroeconomic conditions and the high cost of living impacted on the uptake of capital market products.
- Delays in enactment of relevant regulations and related legal instruments to facilitate financial sector deepening.
- External factors such as capping the interest rate, enactment of laws, recruitment of the CMA Board.

Lesson Learnt

Retail investors preferred investment in capital markets via Collective Investment Schemes (CIS) evidenced by the growth in the Assets Under management from 134 billion in 2021 to 155 billion in 2022.

Recommendations

- Enhance incentives to drive listings at the NSE and gazettement of the reviewed public offers and CIS Regulations to support the capital markets deepening.
- Fast-track enactment of relevant regulations and legal instruments.

4.6.3. Digital Finance

Location: Nationwide

Objective: To provide a framework to harness the potential of digital finance to contribute to Kenya's aspirations towards a sustainable digital economy.

Implementing Agencies: The National Treasury, and CBK.

Project Progress: A regulatory framework to provide for the licensing and oversight of the previously unregulated Digital Credit Providers was established. The Sessional Paper No. 4 of 2020 of the National Cooperative Policy was developed. In addition, the Sovereign Green Bond Framework was established in accordance with the International Capital Market Association Green Bond Principles (2021).

Implementation Challenges

- Disparities in access to financial services in terms of gender, literacy levels, occupation and regions in the country.
- High cost of access to financial services: despite the increased access to financial services, the cost of financial products remains high.
- Low penetration/uptake of other forms of financial services such as insurance, capital markets and pensions.
- Limited access to international finance, low savings rate, high cost of finance, limited capital market, insurance, and pension penetration.

Lessons Learnt

- Players in the future digital finance system need to be both enabled and motivated to create new solutions to the problems of finance.
- The creation of an open financial system depends on two key factors: an enabling open infrastructure, and a supportive policy, legal and regulatory environment.

Recommendations

- Expand financial services options to reach excluded groups.
- Formal financial services institutions need to innovate products that target the 30.1 percent of the adult population who rely on informal services and products while also managing the cost of access to these products.
- Advocate for the uptake of other forms of financial services such as insurance, investments, pension and micro-finance institutions' services.
- Integrate digital interface in the legal processes and regulate the unregulated digital apps.
- Allocate more funding to digitise targeted services.

4.7. OIL, GAS AND MINERAL RESOURCES

Oil, Gas and Mineral resources is one of the key sectors in realisation of the Kenya Vision 2030 and the United Nations' Sustainable Development Goals No. 7, 8 and 9 on affordable, clean, and reliable energy; decent work and economic growth; and industry, innovation and infrastructure respectively.

The Sector has a potential to boost the country's economic growth and development through increased export earnings, development of infrastructure, employment creation and improvement of social welfare. Commercialisation of discoveries in this Sector provides an opportunity for its development to contribute to the country's economic development. As such, it remains one of the priorities of the Economic Pillar of the Kenya Vision 2030. This Sector's value chain consists of upstream, midstream, and downstream.

The following section presents the achievements in the various flagship programmes and projects.

4.7.1. Exploration and Commercialisation of the Oil and Gas Discoveries

Location: Sedimentary Basins in Kenya.

Project objective: To ensure maximum exploitation of the existing oil and gas deposits in Kenya.

Implementing Agency: Ministry of Energy and Petroleum.

Project Progress: During the period under review, the following milestones were achieved: two exploratory wells were drilled in Lamu Basin; Post drilling well data analysis to determine the petroleum system is ongoing; geological and geophysical data was acquired, processed, and interpreted to determine prospectively and promote marketing of the blocks; marketing of Kenya's exploration acreage internationally to potential investors; and reviewed the draft South Lokichar Field Development Plan. The Plan provides a framework that gives optimal development scenarios of technical, economic, commercial, commercial, operational, social, environmental, and political aspects of the oil fields in the interest of the country.

4.7.2. Early Oil Pilot Scheme Project

Location: Tertiary Rift Basin (South Lokichar).

Objective: To evacuate early crude oil from early oil discoveries in the Lokichar South Oil fields to Mombasa for export.

Implementing Agency: Ministry of Energy and Petroleum, and Kenya Pipeline Company.

Project Progress: KPRL facilities were improved to handle crude oil. In addition, licensing of midstream facilities and processes for the Early Oil Pilot Scheme (EOPS), use of tank-trailers to transport the crude oil from Lokichar to Mombasa by road, and production facility for EOPS was approved. Further, consolidation and management of drill waste cuttings within the South Lokichar Oil Fields was undertaken in line with good industry practice; and auditing of EOPS costs was undertaken to ascertain the credibility of recoverable costs. A total of 415,032 barrels of crude oil was received into the KPRL storage terminal. The first batch of 240,150 barrels was exported in August 2019 and with the balance expected to be exported in September 2022**.**

Implementation Challenges

- Spillover effect of disruption of COVID-19 pandemic.
- Force majeure circumstances, particularly heavy rains which destroyed roads hampered transportation of products to Mombasa.
- Interruptions by local communities in Turkana.

Lessons Learnt

- Need for community engagement and buy-in for such programmes.
- Project economics does not favour trucking and accumulation of crude oil and a pipeline for transportation is required.

Recommendations

- Proceed with full field development and commercialise the Kenyan crude oil.
- Develop a crude oil pipeline for exportation of Kenyan Crude Oil.

4.7.3. Capacity Development for Oil and Gas through the Kenya Petroleum Technical Assistance Project

Location: Lokichar and Lamu Basin.

Objective: To enhance capacity in the Oil and Gas Sub-Sector by training personnel on oil and gas.

Implementing Agencies: Ministry of Energy and Petroleum, and Kenya Petroleum Technical Assistance Project.

Project Progress: During the reporting period, the following was achieved in Lokichar: Geoscience Data Acquisition and Plan; Hydrocarbon Resources Audit for Blocks 10BB and 13T; Transactions Advisory Services for petroleum transactions and negotiations; development of the National Petroleum Master Plan; capacity building of the technical team on review of South Lokichar Field Development Plan; Cost Recovery Audit for Blocks 10BB and 13T; and undertaking external legal services to support recoverable cost recovery audit. For the Lamu Basin, a multi-client data acquisition contract was signed to facilitate reprocessing of 2D and 3D legacy seismic data and acquisition of new data in the Offshore Lamu Basin.

4.7.4. Construction of Lokichar-Lamu Crude Oil Pipeline

Location: Turkana, Samburu, Isiolo, Meru, Garissa, and Lamu Counties.

Objective: To develop an 824km crude oil pipeline to transport oil from production fields in Lokichar to Lamu.

Implementing Agency: Ministry of Energy and Petroleum.

Project Progress: The achievements in the period under review include Front-End Engineering Design was completed; Environmental and Social Impact Assessment for the crude oil pipeline was undertaken; and land survey and inspection and preliminary valuation along the pipeline was completed.

4.7.5. Enhancement of Petroleum Products Storage Capacity

Location: Mombasa and Lokichar.

Objective: To rehabilitate and increase storage capacity for petroleum products by providing additional ullage of 100,000m^3

Implementing Agency: Ministry of Energy and Petroleum.

Project Progress: KPRL Port Reitz Tanks rehabilitation plans are underway to align product storage capacity with the improved jetty infrastructure. The project has been approved by the National Treasury in line with the Public Investment Management Guidelines for implementation in FY 2021/22 – FY 2022/23. In addition, KPRL facilities were modified for receipt, storage and exportation of crude oil.

4.7.6. Establishment of Centre of Excellence in Oil and Gas

Location: Morendat Institute of Oil and Gas, Naivasha.

Objective: To bridge the skills gap and build capacity in pipeline management, oil and gas operations and maintenance for Kenya and the region.

Implementing Agency: Kenya Pipeline Company.

Project Progress: A total of 1,030 students were trained in various areas of oil and gas against a target of 865.

Implementation Challenges

- The training plan was adversely affected by the COVID-19 pandemic containment measures.
- Inadequate resources, both financial and human resources.
- Delay in acquisition of accreditation to enable the Institute to offer recognised certificate courses.

Lessons Learnt

- There is a need for a holistic approach in the implementation of the Centre of Excellence plans for concurrent development and acquisition of required pre-requisites.

Recommendations

- Continuous engagement and collaboration with other oil and gas institutes of excellence for provision of world class training.
- Explore technological applications in delivering training programmes.

4.7.7. Mwananchi Liquified Petroleum Gas Project (National LPG Enhancement Project).

Location: Nationwide

Objective: To reduce reliance on unclean sources of energy by promoting use of Liquified Petroleum Gas through the Mwananchi LPG Project.

Implementing Agency: Ministry of Petroleum and Mining.

Project Progress: A total of 250,000 six kg LPG cylinders, 72,000 2-burner cook stoves, 3500,00 burners, 350,000 grills and 60,000 horse pipes were procured and distributed to low-income households. The project implementation roadmap was revised to include procurement of cylinder smart metering devices to allow for payment for small quantities.

In addition, a five-member committee was appointed by the National Oil Corporation to join the Ministry appointees towards implementation of this project. The committee has overseen testing of 106,186 cylinders which were supplied in 2016/17 by the independent 3rd party inspector, delivering 60,000 cylinders fitted with camping valves, 60,000 flex rubber hoses and 72,000 double burner tabletop cook stoves. Further, the committee has leased several warehouses at Kenya National Trading Corporation for storage.

On Cylinder Smart Meter, the contract between the service provider and the Ministry of Energy and Petroleum was signed, the Service Level Agreement developed and reviewed, and the prerequisite licence is ongoing.

Implementation Challenges

- The LPG distribution costs across the country have not been fully established.
- The introduction of 16 percent VAT in July 2021 on LPG affected the uptake of LPG.

Recommendations

- The Government should support financing of LPG projects.
- Strengthening County Government collaboration and other stakeholder engagement at all levels of programme implementation.

4.7.8. Liquified Petroleum Gas Import and Storage

Location: Mombasa and Nairobi.

Objective: To provide capacity for importation and storage of bulk LPG through import handling and construction of storage facilities.

Implementing Agency: Kenya Pipeline Company.

Project Progress: A consultant was engaged in June 2022 to carry out the Front-end Engineering Design; and a final report was expected in 2023 to be used in seeking approval for implementation.

Implementation Challenges

- Delay in project approvals which delayed commencement of the project.
- Emerging competition from the private sector to construct similar facilities resulting in the need to review project viability.

Lesson Learnt

- Delayed implementation of key projects results in private players coming in to fill the gap which may not be in the interest of citizenry.

Recommendation

- There is a need to expedite the approval and implementation of projects.

4.7.9. Quality Assurance of Petroleum Products

Location: Nationwide

Objective: To ensure quality petroleum products and curb dumping of export bound petroleum products in the country.

Implementing Agency: Ministry of Petroleum and Mining.

Project Progress: The following was achieved during the period under review**:** 21,272 samples of petroleum products in various petroleum dispensing sites were tested to enforce quality standards of all petroleum products sold to consumers; 2,896,068,253 litres of export/ duty free motor fuels and 121,516,582 litres of domestic kerosene were marked; and the names of petrol and fuel stations found with adulterated, and export bound motor fuels was published in local dailies.

4.7.10. Development of Regulations for the Petroleum Sector

Location: Nationwide

Objective: To strengthen the existing regulatory framework for midstream and downstream petroleum.

Implementing Agency: EPRA

Project Progress: A set of 11 draft regulations were developed to accommodate the substantive changes introduced by the Petroleum Act, 2019. The existing regulations were reviewed and aligned with the Act, while new regulations were drafted to operationalise the Act and strengthen the existing regulatory framework.

The draft regulations were: the Petroleum (Business Licensing and Facility Construction Permit) Regulations, 2020; Petroleum (Operation of Common User Petroleum Facilities) Regulations, 2020; Petroleum (Importation of Petroleum Products) Regulations, 2020; Petroleum (Information and Statistics) Regulations, 2020; Petroleum (Licensing of Petroleum Road Transportation Business, Road Tankers, and Drivers) Regulations, 2020; Petroleum (Lubricants Facility Construction and Business Licensing) Regulations, 2020; Petroleum (Minimum Operational Stock) Regulations, 2020; Petroleum (Pricing) Regulations, 2020; Petroleum (Products Quality Management) Regulations, 2020; Petroleum (Retail Station Construction and Licensing) Regulations, 2020; and Petroleum (Strategic Stocks) Regulations, 2020.

Implementation Challenge

- Delays in the approval process.

Recommendations

- Engage with relevant parliamentary committees.
- Expedite the enactment of prioritised regulations.

4.7.11. Geological Surveys

Location: Nationwide

Objective: To ascertain the occurrences of minerals in the mineralised areas revealed by airborne and carry out detailed systematic geological mapping and surveys, exploration, and evaluation of minerals in Kenya.

Implementing Agency: National Multi Agency Team domiciled at the Executive Office of the President, and State Department for Mining.

Project Progress: The project targeted to have 100 percent of the country mapped during MTP III period. During the period under review, 50 percent of the country was mapped using the Nationwide Airborne Geophysical Survey which is a starting point in exploration and evaluation of minerals in Kenya, where geophysical data is collected by aircraft to establish potential areas for mineralisation.

On Nationwide Geological Survey Ground follow-up, 30 areas of mineral potential occurrences (anomalies) were identified, and Mineral Occurrence Assessment for Coltan was undertaken at Kora Wells in Garissa

Nationwide geological surveys ground follow-up.

Remote sensing fieldwork

Geologists within the State Department for Mining during mineral assessment for coltan in Kora Wells

Implementation Challenges

- Insufficient specialised equipment, machines and facilities such as exploration survey equipment.
- Increased cases of mine accidents, deaths and diseases associated with illegal use of explosives and dangerous chemicals like mercury in gold mining.
- Mining is a national responsibility under the Fourth Schedule of the Constitution. However, there are cases of interference from the County Governments taking charge of minerals and mining activities in their jurisdictions.

Lessons Learnt

- Continuous mainstreaming of climate change in the sector policies, programmes and projects.
- Enhancing mineral exploration to generate more geological data and information; and the country is under-explored and with limited resources.

Recommendations

- Increase budget allocation to enable the ministry fast-track exploration for oil, gas, and minerals to incentivise investments in the Sector.

- Sensitise communities on occupational health and safety and enforce regulations.
- Enhance data sharing with the multi-agency team conducting the project.

4.7.12. Internationally Accredited Mineral Certification Laboratory

Location: Nairobi

Objective: To provide quality testing services in Kenya and in the region to achieve credible analytical results and perform geotechnical sample tests from the available laboratory.

Implementing Agency: State Department for Mining.

Project Progress: During FY 2021/22, the process of acquisition of an Atomic Absorption Spectrometer (AAS) commenced. However, more modern equipment was to be procured, and staff trained/recruited for the laboratory to attain the international accredited certification standard.

Implementation Challenges

- Inadequate technical expertise in the country.
- High capital investment is required to procure and install specialised laboratory equipment delaying the ISO Certification process.

Lessons Learnt

- Proper budgeting should be made, especially on the indicative budgets for the projects before commencement.
- Project planning is critical in successful implementation and effective funds prioritisation.

Recommendations

- Fast-track the acquisition of AAS and additional specialised equipment and capacity.
- Adopt PPP to ease over-reliance on exchequer funding.
- Invest in the technical and operational capacity of the Mineral Certification Laboratory to facilitate mineral testing for quality assurance.

Mineral certification laboratory at Madini House being installed with specialised laboratory equipment

4.7.13. Establishment of Geological Data Bank

Location: Nairobi

Objective: To create a national data repository for geological data and information since trends in the mining industry require availability of geological data to attract investments.

Implementing Agency: State Department for Mining.

Project Progress: The target to digitise 100 percent geological data by the year 2021/22. In the review period, 90 percent digitisation was achieved, with all the geological reports and vectorised. An online National Geo-data was also established.

Implementation Challenges

- Inadequate technical expertise in the country.
- Most geological data for Kenya is in the custody of the British geological survey while the data in Kenya is not fully updated.
- Inadequate budgetary allocation.

Lesson Learnt

- Project planning is critical in successful implementation and effective funds prioritisation.

Recommendations

- Continuous capacity building and knowledge transfer in all the critical areas.
- Strengthen databases on minerals.
- Fast-track data repatriation from British geological survey.
- Mobilise more resources for the project.
- Adopt PPP to ease over reliance on exchequer funding.

4.7.14. Enhancing Mining for Development

Location: Nationwide

Objectives: To enhance development of mineral resources through value addition to increase the competitiveness of these minerals, to market Kenya as a mining and investment destination as well as to provide a platform for mineral commodities trading.

Implementing Agency: State Department for Mining.

Project Progress: The following was accomplished: Voi Gemstone Centre was constructed and equipping initiated; Minerals and Metals Commodity Exchange was operationalised and trade in agricultural commodities started; participation of the State Department for Mining in four international promotional engagements; the Mining Indaba in South Africa, Prospectus and Developers Association of Canada in Canada, International Seabed Authority in Kingstone Jamaica and International Conference on Great Lakes Region in Harare Zimbabwe. In addition, the African Mineral Development Centre was established in West Africa (Conakry, Guinea).

Implementation Challenges

- High energy prices for mineral value addition initiatives.
- Limited value addition resulting in low earnings.
- Lengthy stakeholder engagements.

Lesson Learnt

- There is huge potential in the mining sector as evidenced by growth of revenue hence mineral value addition is necessary.

Recommendations

- Reduce the cost of power.
- Fast-track the construction and equipping of the value addition centres in the country.
- Develop human resource capacity on polishing and faceting of the gemstone products.
- Develop sustainable stakeholder engagement strategies.
- Increase budget allocation to enable the sub-sector to fast-track exploration of minerals.

4.7.15. Capacity Building of Artisanal and Small-Scale Miners

Location: Nationwide

Objective: To formalise and support Artisanal and Small-Scale Miners.

Implementing Agency: State Department for Mining.

Project Progress: During the reporting period, capacity building of four Artisanal Mining Committees for Narok, Migori, Vihiga and Kakamega counties was undertaken.

Implementation Challenges

- Inadequate budget allocation.
- High stakeholder expectations.
- Illegal use of explosives and dangerous chemicals like mercury and cyanide in gold processing has led to increased cases of mine accidents, deaths and diseases.
- Artisanal and small-scale miners are at risk of accidents, incidences and chronic diseases due to illegal use of explosives and dangerous chemicals like mercury and cyanide in gold processing.

Recommendations

- Mobilise more resources for the project.
- Develop sustainable stakeholder management strategies.
- Continuous capacity building of stakeholders in the mining sub-sector.

4.8. BLUE ECONOMY SECTOR

The Blue Economy Sector seeks to *"sustainably manage and develop the Blue Economy resources for enhanced socio-economic benefits to Kenyans".* It entails sustainable use of aquatic and marine spaces, including oceans, seas, coasts, lakes, rivers and underground water. It encompasses a range of productive sectors, including fisheries, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting and underwater mining and related activities.

The Sector plays an important role in the economic and social development of the country. For example, the fisheries sub-sector's contribution to the country's GDP increased from 0.5 percent in 2017 to 0.7 percent 2021. The total fish production increased from 151.3 thousand tonnes in 2020 to 163.6 thousand tonnes in 2021 and the total value of fish landed increased from Ksh 26.2 billion in 2020 to Ksh 30.4 billion in 2021. The value of fish and fish products exported increased from Ksh. 2.8 billion in 2020 to Ksh.3.4 billion in 2021 against a target of Ksh. 2.2 billion for the same period. The surpassed target was attributed to increased demand for marine finfish and Nile perch fish maws in Europe and China respectively. Further, the increase in marine finfish exports was attributed to the Government's efforts to develop domestic capacity for industrial and semi-industrial deep-sea fisheries.

The achievements under the various flagship programmes and projects are as presented in the following section.

4.8.1. Development of the Blue Economy Programme

Location: Nationwide

Objective: To sustainably manage and develop the blue economy resources for enhanced socio-economic benefit to Kenyans.

Implementing Agencies: State Department for Fisheries, Aquaculture and the Blue Economy, and State Department for Maritime and Shipping Affairs.

Project Progress: The Sector trained 2,118 seafarers to work onboard foreign ships; recruited 444 seafarers in partnership with Mediterranean Shipping Company (MSC); trained 100 fishing crew on safety at sea skills; revived the Kenya National Shipping Line (KNSL) through restructuring of ownership and operations by signing of a memorandum of understanding between KNSL and MSC; transformed Bandari Maritime Academy into a maritime centre of excellence for maritime skills development for the blue economy; launched Vijana Baharia Programme where 133 students benefited from Higher Education Loans Board (HELB) loan under the Maritime Education and Training from Kenya Maritime Authority; sensitised 3,314 youth/ learners on the blue economy in 15 schools in Mombasa, Kilifi, Kwale, Tana River and Lamu counties; developed blue book for Indian Ocean, Lake Victoria and aquaculture covering 15 Aquaculture Business Development Programme implementing counties (Nyeri, Kirinyaga, Meru, Homa Bay, Migori, Kakamega, Embu, Tharaka Nithi, Machakos, Kajiado, Kiambu, Busia, Siaya, Kisii and Kisumu).

Implementation Challenges

- Inadequate policy integration and uncoordinated development in the Blue Economy Sector.
- Inadequate supportive legislative framework and policies.
- Inadequate training facilities and equipment to offer requisite training for qualification and certification under the Standards of Training Certification and Watch-keeping (STWC ’78) Convention.
- The emergence of COVID-19 pandemic disrupted training programmes.
- Inadequate funding for the programme.

Lesson Learnt

- The Blue Economy Sector has potential to drive economic growth.

Recommendations

- Develop and review policies, necessary supportive legislation, strengthen institutions and promote collaboration and cooperation amongst the different stakeholders.
- Develop and strengthen relevant training facilities and equip them appropriately.
- Increase funds to unlock the potential of the Blue Economy Sector.
- Enhance the utilisation of technology and online platforms in conducting awareness to the youth on the available untapped opportunities within the maritime industry.
- Undertake a survey on the impact of COVID-19 pandemic along the fish value chain to inform policy.

4.8.2. Fisheries and Maritime Infrastructure Development Programme

Location: Kwale, Mombasa and Kilifi.

Objective: To provide enabling infrastructure for the sustainable exploitation of the Blue Economy.

Implementing Agencies: State Department for Fisheries, Aquaculture and the Blue Economy.

Project Progress During the review period, the fisheries sub-sector constructed/ rehabilitated coastal fishing facilities to different completion levels namely:- fish market at Likoni (80 percent); fish market at Malindi (70 percent); the Shimoni Mariculture Centre (60 percent); fish landing site at Kichwa Cha Kati (75 percent); fish landing site at Vanga (95 percent); fish landing site at Gazi (87 percent); fish landing site at Kibuyuni (72 percent); and fish landing site at Ngomeni (90 percent). The renovation and rehabilitation work at the Liwatoni Fisheries Complex, Mombasa was at 90 percent complete, construction of Liwatoni sea wall (75 percent), while rehabilitation and remodelling of fish processing plant at the Complex was completed.

Implementation Challenges

- Delay in the disbursement of funds under the development budget.
- Inadequate monitoring and evaluation mechanism to facilitate fast-tracking of projects implementation and reporting.
- The COVID-19 pandemic slowed down the implementation of projects.

Lesson Learnt

- Fisheries and maritime infrastructure are critical in the exploitation of marine and fisheries resources.

Recommendations

- Enhance stakeholders' cooperation and collaboration.
- Strengthen the monitoring and evaluation systems.

4.8.3. Exploitation of Living Resources under Blue Economy Programme

Location: Countrywide

Objective: To increase socio-economic benefits from Kenya's Exclusive Economic Zones and marine aquaculture; fish production from inland bodies; per capita fish consumption; and the diversity of export markets for Kenyan fish and fishery products.

Implementing Agencies: State Department for Fisheries, Aquaculture, and the Blue Economy.

Project Progress: During the review period, the fisheries-sector increased fleet development from nine in 2018/19 to 21 fishing vessels in 2021/22 against a target of 45 fishing vessels. The under-performance was attributed to challenges posed by COVID-19 pandemic. On improvement of fish production, 8,000,000 fingerlings of Nile tilapia and catfish were stocked in Lakes Naivasha and Jipe, Turkwel Dam and community small dams. This was in addition to 1,900,000 Tilapia fingerlings stocked in dams in 20 counties (Kakamega; Bungoma; Siaya; Kisii; Nyamira; Nakuru; Narok; Trans-Nzoia; Uasin Gishu; Kirinyaga; Kiambu; Muranga; Nyeri; Nyandarua; Meru; Tharaka Nithi; Makueni; Kitui; Machakos; and Embu counties); infrastructural support was provided to 477 active seaweed farmers in Kwale county through construction of: two (2) seaweed stores that incorporated a section for compaction of seaweed bales in Kibuyuni and Gazi fish landing sites; and a seaweed drying shed and installation of improved seaweed drying racks in Gazi fish landing site. Besides, KMFRI established a station in Kibuyuni for technical support to seaweed farmers.

Implementation Challenges

- Inadequate capacity and skills for fisheries management and development.
- Lack of an integrated policy framework for development of the Blue Economy.
- Delays in releasing development budget.
- The emergence of COVID-19 pandemic leading to low pace of project implementation.
- Floods resulting from the long rains experienced in the Lake Victoria region.

Lesson Learnt

- Inadequate resources and effects of climate change impacted negatively on the fisheries resources.

Recommendation

- Adequate and timely release of funds for projects and programmes is critical for the successful implementation of projects.

4.8.4. Aquaculture Business Development Programme

Location: 15 Counties (Nyeri, Kirinyaga, Meru, Homa Bay, Migori, Kakamega, Embu, Tharaka Nithi, Machakos, Kajiado, Kiambu, Busia, Siaya, Kisii and Kisumu).

Objective: To increase the incomes, food security and nutritional status of the wider communities of poor rural households involved in aquaculture in the targeted counties.

Implementing Agency: State Department for Fisheries, Aquaculture and the Blue Economy.

Project Progress: The programme supported 5,846 Level 1 farmers with fish production materials (2,945 liners and 2,901 predator nets); constructed 3,597 new fishponds units; and rehabilitated 2,483 fish production units for fish farmers in the 15 ABDP implementing counties.

Implementation Challenges

- Delay in recruitment of Project Coordination Unit staff at the onset of the programme.
- Inadequate time to meet the general conditions precedent for financing by the International Fund for Agricultural Development (IFAD).
- Delay in issuance of No Objection for Consultancy Services, approval of Terms of Reference and Tender documents by IFAD.
- Delays in exchequer releases and budget cuts.
- Emergence of the COVID-19 pandemic.

Lesson Learnt

- Timely decision-making is key in project implementation.

Recommendations

- Fast-track the processes of issuance of No Objection by IFAD.
- Enhance disbursement of funds by the State Department to the programme operations account.

4.8.5. Kenya Marine Fisheries and Socio-Economic Development Programme

Location: Coastal Counties (Mombasa, Lamu, Kwale, Kilifi and Tana River).

Objective: To improve management of priority fisheries and mariculture and increase access to complimentary livelihood activities in coastal communities.

Implementing Agency: State Department for Fisheries, Aquaculture, and the Blue Economy.

Project Progress: The project was launched in 2021, and 281 County staff were trained in participatory integrated community development (40 as Trainers of Trainers and 241 as Trainers of Facilitators).

Implementation Challenge

- Lengthy consultative process among the agencies involved.

Lesson Learnt

- Stakeholder involvement is critical at all stages of the project cycle.

Recommendation

- Strengthen stakeholders' involvement at all stages of the project cycle.

4.8.6. Aquaculture Technology and Development and Innovation Transfer Programme

Location: Nationwide

Objective: To increase the uptake of aquaculture technologies, innovations and improve safety of farmed fish.

Implementing Agency: State Department for Fisheries, Aquaculture, and the Blue Economy.

Project Progress: During the period under review, the sub-sector constructed a training facility in Sagana to 60 percent completion; established 10 Aquaponics Systems to entrench fish farming and technology transfer among the youth in learning institutions (Kerio Valley Secondary School in Elgeyo Marakwet County; Nyakach Girls High School in Kisumu County; Siwot Technical College in Bomet County; Ikuu High School in Tharaka Nithi County; Rarakwa Girls High School and Gatura Girls School in Murang'a County; Waita Secondary School in Kitui County; State House Girls High School in Nairobi County; Mukimwani Secondary School in Makueni County; and Ndalani Secondary School in Machakos County).

Implementation Challenge

- Delay in the disbursement of funds under the development budget.

Recommendation

- Timely disbursement of funds.

4.8.7. Development of Fish Quality Laboratories Programme

Location: Nairobi, Mombasa, and Kisumu.

Objective: To enhance the safety of fish and fish products consumed locally and exported

Implementing Agency: State Department for Fisheries, Aquaculture, and the Blue Economy.

Project Progress: During the period under review, the fisheries sub-sector completed construction of three fish quality control laboratories in Nairobi, Kisumu, and Mombasa; installed CCTVs and completed electrical besides mechanical works.

Completed Mombasa Fish Quality Laboratory

Completed Kisumu Fish Quality Laboratory

Implementation Challenges

- Inadequate stakeholder engagement.
- Delay in the recruitment of laboratory staff.
- Inadequate funding.

Lesson Learnt

- Operationalisation of the fish quality control laboratories ensures value for money for investment.

Recommendations

- Enhance stakeholders' engagement in the project conceptualisation, design, and implementation.
- Fast-track the recruitment of relevant staff.

4.8.8. Rehabilitation of Fish Landing Sites in Lake Victoria Programme

Location: Lake Victoria Region.

Objective: To improve fish handling facilities to reduce post-harvest losses.

Implementing Agency: State Department for Fisheries, Aquaculture, and the Blue Economy.

Project Progress: During the period under review, the sub-sector completed rehabilitation of Sori and Lwanda K'Otieno fish landing sites in Migori and Siaya counties respectively (see Photos 4c, 4d and 4e). Other landing sites were up to different levels of completion (Nyandiwa in Homa Bay- 10 percent; Mulukhoba in Busia – 80 percent; Wilchlum in Siaya – 80 percent; and Ogal in Kisumu County – 40 percent). However, rehabilitation works were stopped due to the rising water levels of Lake Victoria following the long rains experienced in April and May 2020.

Implementation Challenges

- Rising Lake Victoria water levels disrupted the rehabilitation works.
- Delayed payments due to untimely release of funds.
- Inadequate monitoring and supervision of the project's implementation.

Lessons Learnt

- Climate change mainstreaming is key in project execution.
- Participation of relevant institutions is key in project development.

Recommendations

- Timely disbursement of funds.
- Establish an efficient monitoring and evaluation mechanism to fast-track projects' implementation and reporting.
- Relocate the landing sites to higher ground and involve all relevant stakeholders.

Main building of Sori Landing Site


Kenyatta University Ho
MAIN ENTRANCE

5. CHAPTER FIVE

SOCIAL PILLAR

"Investing in the people of Kenya"

The goal of the Social Pillar of the Kenya Vision 2030 is to invest in the people of Kenya. It seeks to build a just and cohesive society enjoying equitable social development in a clean and secure environment. This is to be realised through transformation and implementation of policies, programmes, and projects in six priority sectors namely, Education and Training; Health; Environment, Water, Sanitation and Regional Development; Population, Urbanisation and Housing; Gender, Youth and Vulnerable Groups; and Sports, Culture and Arts.

Overall, the Pillar recorded a mixed performance during the review period. Although some of the sectors within the Pillar registered remarkable improvement, some of the targets were not met due to inadequate funding, and weak legislation. The following sections highlight the achievements in each of the sectors within the Social Pillar.

5.1. EDUCATION AND TRAINING

The Sector seeks to have a *"Globally Competitive Quality Education, Training and Research for Sustainable Development."* During the reporting period, the Sector was composed of Early Learning and Basic Education; Vocational and Technical Training; Post Training and Skills Development, Implementation of Curriculum Reforms and University Education and their respective agencies including the Teachers Service Commission. The Sector priorities include actualisation of the right to free and compulsory basic education; improvement of post-basic education; enhancement of quality and relevance of education and training; integration of ICT into teaching and learning; enhancement of financing in education and training; and improvement of governance at all levels. The next section presents the flagship projects and programmes implemented during the review period.

5.1.1. Universal Secondary Education

Location: Nationwide

Objective: To achieve 100 percent primary to secondary school transition.

Implementing Agency: State Department for Basic Education.

Project Progress: During the 2021/22 period, PSTR stood at 91 percent with 3,587,081 students placed and enrolled in public secondary schools compared to 3,289,885 in 2020. The increase in numbers was attributed to the Government's commitment to enforce various interventions including the implementation of the 100 percent transition policy, FDSE programme and enforcement of the national school re-entry guidelines. To facilitate the re-entry of the out of school learners, the Ministry of Education adopted a multi-sectoral approach, where National Government Administration Officers (NGAO), including county commissioners and chiefs continually mop up learners to go back to school.

Another notable intervention was the awarding of scholarships through the Elimu Scholarship Programme, through which vulnerable and disadvantaged learners can transition into secondary school. In 2021/22, 17,960 learners benefited from the scholarship package which included school fees, school kits and a termly stipend.During the period under review, KSh. 62.42 billion was disbursed to 9,187 public secondary schools to support the 3,587,081 students enrolled in these schools. Additionally, to continue fostering the inclusion of special needs learners, KSh. 166.9M was disbursed to 91 Special

Needs Education secondary schools, where a total of 5,488 learners benefited.

To meet the 1:1 student textbook ratio target, a total of 3,684,604 set-books were supplied to 9,145 secondary schools. Additionally, 2,020 computers, at a cost of KSh. 200 million, were distributed to 196 secondary schools, to improve the level of ICT integration in teaching and learning. A sensitisation workshop on ICT integration was also conducted for 315 principals across the country.

Implementation Challenges

- Insecurity and long distances of travel to school in some parts of the country affected learners' attendance and retention.
- Poverty in some households has led to incidences of teenage pregnancy and early marriages which have kept learners out of school despite the enforcement of the re-entry guidelines.
- The shortage of teaching staff in schools has negatively affected the quality of teaching and learning.
- Inadequate and dilapidated infrastructure in some schools.

Lessons Learnt

- Enhancing access, retention and completion of secondary education requires concerted effort by various stakeholders.
- The 100 percent transition policy from primary to secondary education has gone a long way in enhancing access to secondary education.
- Guidance and counselling are key in enhancing retention in secondary schools.
- Introduction of the maintenance and improvement fund, drawn from capitation, has gone a long way in promoting infrastructure improvement in schools.
- The EduAfya Programme [National Health Insurance Fund (NHIF)] for secondary school learners has lifted the burden of health care from many needy households.

Recommendations

- Increase funding for infrastructure improvement in schools.
- Recruit more teachers to address the teachers' shortage in schools. The increase in enrolment demands a commensurate increase in teaching staff as well.
- Implement the policy on day wings in existing boarding schools to increase access to learners who may be locked out due to finances or other reasons. This would enhance the implementation of the 100 percent transition policy.

5.1.2. Technical Vocational Education and Training Infrastructure and Equipment

Location: Nationwide

Objectives: To increase the uptake of Technical, Vocational Education and Training.

Implementing Agency: State Department for Vocational and Technical Training.

Project Progress: The average completion rate for the institutions was at 89.03 percent with the following Technical Vocational Centres practically completed: Lafey, Kitui East, Gilgil, Mbeere North, Githunguri, Yatta, West Mugirango, Kacheliba, Ruiri, Uriri, Kitutu Chache South, Rarieda, Kiharu, Njoro, Butula, and Kigumo. The remaining 14 TVET Institutions were nearly completed at the end of FY 2021/22.

The Department targeted to equip four TVET institutions. Achievement was realised for three Technical Training Institutes (TTIs) namely: Sikri DB, Karen and Machakos DB. Sikri TTI DB was provided with assistive devices benefiting 1,695 trainees, Karen TTI, with electrical and electronics equipment and Machakos TTI DB with leather technology equipment. The under-achievement was due to the detention of equipment for Butere TTI.

Chamasiri TVC

Implementation Challenges

- Delayed disbursement of National Government Constituencies Development Funds (NGCDF) totalling to KSh. 10,000,000 counterparts' funding led to delays in completion of new TVCs in some constituencies.
- Variations in projects' cost led to delays in project completion.

Lessons Learnt

- Timely and accurate data is key to informing decision-making processes and planning.
- A phased approach is necessary for implementation of flagship projects as well as other development projects.

Recommendations

- Enhance funding to cater for increased enrolment which puts stress on the physical facilities.
- Continued training to the Board of Governors/Councils and senior management of TVET institutions on capitation data management.
- Provide adequate funds for the development of policies and other relevant legal instruments implementation of the State Department's mandate.

5.1.3. Basic Education - Competency Based Curriculum

Location: Nationwide

Objectives: To ensure that education nurtures the potential of every learner and provides different pathways.

Implementing Agency: Kenya Institute of Curriculum Development (KICD), Kenya National Examinations Council (KNEC), and State Department for Basic Education.

Project Progress: CBC was rolled out in Grade Six in April 2022. 20 teachers handbooks and 20 learners course books for 18 indigenous languages, Germany and Hindu Religious Education were developed; 520 electronic support materials were developed and disseminated; 489 complementary materials for Pre-primary 1 and 2 and Grade 1 to Grade 6, and 171 curriculum support materials submitted for Grade Seven were evaluated; 35,161 print curriculum support materials were disseminated; 64 curriculum designs were adapted to suit learners with special needs; three Teachers Orientation Manuals for Language activities in early years education were developed; three early years language activities course books were adapted to suit learners with special needs; 20 teachers' handbooks and disseminated through Kenya Education Cloud (https://kec.ac.ke/); 520 radio and TV lessons were produced; and the evaluation of Grade 6 course materials was completed. To support digital learning, over 20,000 programmes were produced and broadcasted through Radio, EDU TV Channel and e-content dissemination through Kenya Education Cloud.

KICD in collaboration with TSC and other agencies in the Ministry of Education, carried out capacity building for 148,819 curriculum implementers. These included Master Trainers, Champion Teachers, Curriculum Support Officers, Education Officers, and Teachers. KICD is constructing an Ultra-Modern Education Resource Centre. Once completed the Centre will facilitate the curriculum specialists to carry out experiments, demonstrate and test ideas, simulate and model concepts for effective curriculum development, implementation, and assessment. The completion of the Ultra-Modern ERC stood at 88 percent by the end of the FY 2021/22.

During the review period, KNEC conducted an upgrade of the online portal for uploading and disseminating assessment tools (tests) and scoring scores to support School Based Assessment (SBA) at Grade 5. KNEC conducted the 2021 Grade 3 Monitoring Learner Progress (MLP) Assessment to 1,313,014 learners (Male - 678,748, Female - 634,266). In addition, the 2021 School Based Assessments at Grade 4, Grade 5 and for Special Needs Learners; conducted Grade 4 SBA and assessed 1,338,766 learners (Male - 697,886, Female - 640,880); and conducted Grade 5 SBA where 1,306,075 learners were assessed (Male - 684,556, Female - 621,519). For learners with severe disabilities, assessments were conducted at two stages as follows: Foundation Stage where 7,238 learners (Male - 4,285, Female - 2,953) were assessed and at Intermediate Stage where 4,617 learners (Male - 2,595, Female - 2,022) were assessed.

Implementation Challenges

- Budgetary cuts which affected the implementation of some of the targeted programmes and projects.
- The COVID-19 pandemic affected timely implementation of some of the targeted programmes.
- The school calendar rearrangement due to COVID-19 pandemic led to KNEC administering examinations in March and December 2021 which resulted in burnout of staff.
- Inadequate understanding of the new assessment concepts by stakeholders and the public.
- Inadequate stakeholder engagement, especially parents who are the key implementers of the new modes of assessment.
- Inadequate resources to carry out assessment functions.

Lessons Learnt

- Comprehensive engagement of all relevant stakeholders to ensure that all perspectives on implementing CBC are considered, and potential challenges are identified early.

- Continuous monitoring and evaluation of the implementation process for continuous improvement.
- Implementation of CBC and CBA requires adequate resources such as human resources, infrastructure, and teaching materials. These resources need to be provided in a timely and consistent manner to support effective implementation.
- Effective communication of all stakeholders throughout the curriculum reforms process is essential for successful implementation of CBC and CBA.
- Numerous and sustainable assessments are to be conducted throughout the basic education system.

Recommendations

- Adequate budgetary allocation to facilitate effective implementation of CBC and CBA at all levels of education.
- Increased awareness to stakeholders to ensure buy-in of CBC and CBA.
- Continuous capacity building of curriculum implementers on CBC and CBA.
- Create partnerships and synergies across the education sector with the view of improving reliability and validity of the MLP process.
- Develop and implement strategies to provide online assessments to reduce costs.

5.1.4. Competency Based Education and Training for TVET

Location: Nairobi

Objectives: To ensure that TVET courses are competency-based and aligned to the labour market demands.

Implementing Agencies: State Department for Vocational and Technical Training (SDVTT), and Curriculum Development Assessment and Certification Council.

Project Progress: SDVTT developed 447 industry-led curricula which formed the basis of the Competency Based Education and Training (CBET) training. Additionally, the Department developed 100 learning guides in various courses and developed digital content for 22 courses.

A total of 15,046 stakeholders were trained in the conduct of CBA with 2,600 assessors and verifiers registered to assist in the conduct of assessment. Additionally, 212 institutions were registered as assessment centres to conduct CBA.

Implementation Challenges

- Inadequate funds to cater for the funding of capitation, hence the institutions operated at a deficit in the year.
- The growth of enrolment outstrips the growth of budgetary allocation to the vocational and technical training sub-sector.
- Enhanced partnerships and collaborations with all stakeholders is crucial to efficiency in delivery of services.
- Forward planning and partnerships are important in responding to the demands for services in an efficient and effective manner

Recommendation

- Establish a Policy Planning and Support Services Directorate in the SDVTT to provide a budget line for policies, guidelines, regulations, and other relevant legal instruments.

5.1.5. Kenya National Qualification Framework

Location: Nairobi

Objectives: To promote lifelong learning through recognition of acquired skills and knowledge.

Implementing Agencies: Kenya National Qualification Authority (KNQA), State Department for Vocational and Technical Training.

Project Progress: The Kenyan National Qualification Framework (KNQF) has made significant progress in recent years towards its goal of improving the quality education and training in the country. KNQA is in the process of implementing the Kenya National Learners Records Database (KNLRD) aimed at establishing a unified database that documents the educational accomplishments of all learners in Kenya. During the period under review, a total of 17 Qualifications Awarding Institutions and 1,268 Qualifications were registered in the Framework. KNLRD was developed and registration of learners was on course.

A total of 35 institutions, against a target of eight were built during the period. At the same time, 10 national policies, standards and guidelines were developed against a target of six with two of the national policies being at the validation phase.

The SDVTT coordinated development and implementation of the Recognition of Prior Learning (RPL) Policy as well as assessment of 44 candidates during the first piloting phase. In addition, 52 RPL practitioners were trained in readiness for the national roll-out. A total of 3,278 applications were also processed through the alignment and validation of qualifications process.

Implementation Challenges

- Lack of awareness and understanding of the Framework among stakeholders, including employers, learners, and educational and training institutions has resulted in a reluctance to adopt the Framework, which has limited its effectiveness in achieving its goals.
- Lack of necessary resources and expertise by educational institutions to develop and offer qualifications that meet the standards set by KNQF.
- Rapid changes in the market forces are transforming the nature of work and the skills required to succeed in the labour market.
- Challenges in recognition of and transition from informal learning to formal learning.

Lessons Learnt

- To improve the quality of education and training, focus should be put on specific standards of qualification to ensure that they are relevant, and nationally and internationally recognised.
- The alignment of education and training to KNQF ensures programmes are tailored to the needs of the economy, which helps to address skills mismatch and improve employability. This ultimately supports economic growth and development in Kenya.
- Recognition of prior learning framework has enabled learners to gain credit for their prior learning and experience which has reduced time and cost of acquiring new qualifications.

Recommendations

- Create awareness among stakeholders including learners, educators, employers and the public about KNQF.

- Enhance human capital through recruitment of sufficient and competent staff to effectively implement the Framework.
- Allocate adequate resources to support the implementation of KNQF. This will facilitate the acquisition of necessary resources such as land, equipment, materials and training for staff for the successful implementation of the Framework.
- Build the capacity of staff in education and training institutions to effectively implement KNQF.
- Enhance stakeholder engagement in the implementation of KNQF.
- Ensure the adaptability of the framework to the changing needs of society.

5.1.6. National Education Management Information System

Location: Nationwide

Objectives: To establish a data system for use in the Education & Training Sector; and conduct data needs assessment from data providers and users.

Implementing Agency: State Department for Basic Education.

Project Progress: By the end of 2021/22, the overall NEMIS implementation was at about 80 percent covering a total of about 9 million learners. Secondary education had a 95 percent implementation covering 3.7 million learners while primary education had a 66 percent implementation covering about 5.3 million learners.

Data from the system is used for allocation of funds under FDSE, conduct Form One selection and placement, monitor transition of learners from primary to secondary schools, and facilitate the implementation of the EduAfya medical cover for learners in public secondary schools. The EduAfya medical scheme covers learners in public secondary schools and is done in collaboration with NHIF, in efforts to achieve the target of UHC. Through NEMIS, unique identifiers for the learners are integrated with the NHIF system on a real-time basis.

Currently, the Basic Education Subsector is in the process of re-engineering NEMIS to accommodate more user processes, allow a wider audience, and incorporate more security features. During the period under review, NEMIS was re-engineered to include five modules to capture data on the institutions, learners in schools, staff (teaching and non-teaching), status of infrastructure in schools, financial resources (all income and expenditures) in schools and generate all relevant reports from the system. The modules are aimed at digitising processes in programmes, including school attendance reports, cash balances at school level and transporter details, commodity stock reports at school level and at sub-county level, commodity procurement, and tracking both in the warehouse and in transit.

Implementation Challenges

- Inadequate buy-in from users in adoption and improvement of NEMIS.
- Inadequate resource allocation to enable data keying, data quality checks, the collection and use of feedback to improve the system.

Lesson Learnt

- Continuous stakeholder engagement on the importance of adopting and using the NEMIS system regularly to input and share quality data is key, to allowing the collection of comprehensive data from all levels of education.

Recommendations

- Awareness creation of stakeholders on the NEMIS system.
- Capacity building of users and implementers on the NEMIS system.
- Develop a policy framework for management of education data and information to ensure that the education sector has a systematic process of data collection, collation, storage and analysis as well as reporting and dissemination of statistical reports.
- The actualisation of a central repository for all educational data will enable the use of uniform, accurate and up-to-date data for evidence-based planning and decision making to improve service delivery in the sector.

5.1.7. National Skills Development

Location: Nationwide

Objectives: To enhance coordination of education and training.

Implementing Agencies: State Department for Post Training and Skills Development.

Project Progress: A National Skills Development Policy was developed and submitted to the Cabinet for approval. Similarly, a draft of the National Skills Development Bill was developed. The Bill (is still at the Attorney General's Office for consideration) will provide for the establishment of the National Skills Development Council, Sector Skills Councils, National Skills Occupational Standards, and the National Skills Development Fund. An automated National Skills Inventory was established: a survey tool was developed for mapping the industry players where industries in 36 counties were mapped; a skills-gap survey tool was developed and circulated to all Huduma Centres for data collection from unemployed youths out of school.

Implementation Challenges

- The National Skills Development Policy had not been approved by the Cabinet by the end of the financial year.
- Slow process of development of the National Skills Development Bill.

Lesson Learnt

- The operationalisation of a new establishment requires adequate funding and the development of a legal framework and other instruments.

Recommendations

- Fast-track the development of the National Skills Development Bill and other necessary legal instruments.
- Allocate resources for the implementation of projects and programmes.

5.1.8. National Psycho-Education Assessment and Placement Centre

Location: Nationwide

Objectives: To enhance assessment and placement of special needs learners.

Implementing Agencies: Kenya Institute of Special Education, and State Department for Basic Education.

Project Progress: In the FY 2021/22, the Psycho-Educational Assessment Centre assessed 5,054 children. Outreach services were undertaken in Isiolo, Laikipia, Uasin Gishu, Nakuru, Kilifi and Mombasa counties and reached 1,563 parents, 65 teachers and 53 education officers. Therapy services were also provided to 6,412 clients. The Institute developed assessment tools for learning disabilities, which are still undergoing piloting. The Kenya Institute of Special Education trained and awarded qualifications of diploma and certificates to Special Needs Education Teachers and other personnel; 814 certificates and 1,076 diplomas awarded in 2021/22. The 1,076 Diploma graduates included two cohorts, as graduation in FY 2020/21 was interrupted by the closure of academic Institutions due to COVID-19 pandemic.

Moreover, the Institute received KSh. 75.5M in FY 2021/22 for construction and equipping of the National Psycho-Educational Assessment Centre in readiness for expanded service delivery. The Centre is now serving children with special needs and disabilities at an enhanced scale. The Therapy Section was rated Level 3 by the Kenya Medical Practitioners and Dentists Council, the highest for stand-alone facilities in Africa. The equipping of the Centre was 73 percent at the end of FY 2021/22.

The flagship project is fully facilitated in construction and few equipment is supplied at the Centre. This enabled the Centre operations to increase and serve more customers. With the additional equipment, the Institute managed to offer occupational, physiotherapy, autism assessment, sensory and hydrotherapy sessions to persons with special needs and disability to improve their livelihood.

Implementation Challenges

- Shortage in resources leads to inadequate human capital, specialised equipment and medical practitioners required to serve clients. This caused delays in school placement among children with special needs and disabilities.
- Stigmatisation of persons' with disabilities in society hampered access to education for children with special needs and disabilities across the country.
- Unavailability of specialised equipment in the Kenyan market.

Lessons Learnt

- Early identification and interventions for children with special needs is vital in preventing the progression of severity of their disabilities.
- There is a need to support outreach and visibility activities to empower Kenyans and local communities on how special needs learners can be assisted through assessment and placement at the Centre.
- Assessment and school placement have enabled children with special needs to get access to education in a conducive environment.
- There are unique and severe disabilities which require specialised practitioners.

Recommendations

- Provide adequate resources including human resource, specialised equipment, and medical practitioners to enable the National Psycho-Education Assessment and Placement Centre to be fully operational.
- Increase outreach activities to communities to sensitise them on special needs and disability matters.
- Establish partnerships with manufacturers of specialised equipment to facilitate easier and cost-effective access to specialised equipment.
- Waiver of taxes and levies for the specialised equipment to make them affordable.
- Establish 10 regional assessment centres to facilitate improved service delivery.
- Equip the existing educational assessment resource centres located in sub-counties to facilitate assessment and placement of children with special needs to learning institutions.

- Ensure consistency in therapy sessions for persons living with special needs and disabilities and follow ups to help them become independent.

5.1.9. Enterprise Development Incubators

Location: Nationwide

Objectives: To support creativity and innovation, research and development in education and training.

Implementing Agencies: State Department for Vocational and Technical Training (SDVTT), and State Department for University Education and Research.

Project Progress: A total of five cottage industries were established in the following Vocational and Training Centres (VTC) namely: Dandora Green Light VTC in Nairobi dealing with motor vehicle mechanic, Kinoo VTC in Kiambu dealing with catering and hospitality; Nyaigesa VTC in Nyamira with agribusiness; Ngisiru in Migori with hairdressing and beauty therapies and Joseph Nyamesocho VTC focuses on leatherwork and shoe making.

St. Joseph Nyamesocho VTC Leather Work and Shoe Making

Implementation Challenges

- Low uptake of products and services in the market due to lack of public awareness.
- Inadequate equipment and trainers to effectively produce goods and services.
- Inadequate distribution channels for produced goods.

Lesson Learnt

- Forward planning and partnerships are important to be able to respond to the demands for services in an efficient and effective manner.

Recommendations

- Undertake continuous marketing of the products in the Kenyan and foreign markets.
- Develop policies and guidelines to ensure improved implementation of the incubation programme.
- Partner and collaborate with the Ministry of Trade, private sector, and development partners to improve access to markets.

5.1.10. Teacher Provision, Competence and Professional Development

Location: Nationwide.

Objectives: To improve the provision and competence of teachers at the basic education level.

Implementing Agency: TSC

Project Progress: During the Financial Year 2021-22, TSC recruited an additional 5,000 teachers on a permanent and pensionable basis. A total of 148,819 teachers were trained on Grades Six and Seven CBC and CBA content.

Implementation Challenges

- Inadequate resources to fill in staffing gaps in learning institutions.
- Insecurity in some parts of the country, poor infrastructure and cultural barriers contributed to harsh working conditions, which made it hard to retain teachers in these areas.
- Slow uptake of Teacher Professional Development (TPD) programmes.
- Inadequate training time due to short holiday breaks occasioned by a change in the school calendar due to the COVID-19 pandemic.

Lessons Learnt

- Technology presents virtual working space and new ways of delivering the curriculum.
- Mental health issues among teachers affect quality curriculum delivery.

Recommendations

- Subsidise the cost of undertaking TPD programmes.
- Recruit additional teachers for efficient curriculum implementation, particularly on the new learning areas in CBC. These areas include performing arts, sports, and physical education, technical and engineering, career and technology, and indigenous languages.

5.1.11. Laptops and Assistive Technology for Learners with Special Needs

Location: Nationwide

Objective: To improve the quality of learning for the visually impaired and physically disabled learners.

Implementing Agencies: State Department for Basic Education, and ICT Authority

Project Progress: In the FY 2021/22 under the DLP Phase 1, 26 schools benefited from a total of 465 devices which included 211 Large Display Devices for Hearing Impairment, 138 Large Display Devices for Visual Impairment, 12 Embosser Printers, 26 Digital Content Server & Wireless Router, 50 Telecommunication Devices for the Deaf and 26 Projectors.

Implementation Challenge

- Inadequate resources for the provision of assistive devices for all learners.

Lesson Learnt

- Continuous monitoring and evaluation is critical for successful programme implementation.

Recommendations

- allocate adequate resources to enhance provision of assistive devices to learners with various categories of disabilities.
- Conduct monitoring and evaluation of the programme.

5.1.12. Student Financing

Location: Nationwide

Objectives: Impactful financing to students to enable successful completion of their training.

Implementing Agencies: HELB, and SDVTT.

Project Progress: During the reporting period, 343,417 university students were awarded loans amounting to KSh. 14,711,049,571. 17,864 vulnerable university students were awarded bursaries amounting to KSh. 137.101 million. 104 postgraduate university students comprising 64 pursuing Masters, and 42 pursuing PhDs were awarded scholarships amounting to KSh. 31.3 million. 180,078 students were awarded loans amounting to KSh. 7,209,389,096 towards promotion of Science, Technology, Engineering, Mathematics, and Innovation in the period under review.

A total capitation of KSh. 5.2 billion was awarded to 300,255 trainees. 106,048 TVET trainees received loans totalling KSh. 3,868,061,270, while 19,696 vulnerable TVET students received bursaries amounting to KSh.100 million in the period under review.

Implementation Challenges

- COVID-19 pandemic slowed down the economy leading to job losses and salary cuts that affected loan recoveries.
- Increased enrolment in universities and TVETs without a corresponding increase in capitation funding.
- Increased demand for tertiary education loans without growth in the loan revolving fund.

Lesson Learnt

- Automation of services is key to enhance continuity of services, online self-service and online learning.

Recommendations

- Provide capitation that is commensurate with the enrolment figures.
- Forster partnerships and strategic linkages to mobilise resources beyond the exchequer.

5.2. HEALTH SECTOR

The Health Sector seeks to ensure *"Equitable, Affordable and Quality Health Care of the Highest Standard"* for all citizens by the year 2030. The Sector is key in ensuring a healthy and productive populace. It is one of the "Big Four" Agenda initiatives with particular focus on the achievement of UHC, increasing access to quality healthcare services and offering financial protection to people when accessing healthcare. Further, the Sector is key to the realisation of SDG No. 3 and Agenda 2063 of the African Union, both of which seek to ensure healthy lives and well-being for all.

5.2.1. Social Health Protection Programme

Location: Nationwide.

Project Objective: To enhance social health protection for targeted populations.

Implementing Agencies: NHIF, Ministry of Health (MoH).

Project Progress:

The Linda Mama Programme/Free Maternity Cover - Funds received for Linda Mama through NHIF for the period was KSh. 4,493,259,781. During the period under review, there were a total of 1,186,004 registered expectant mothers, a slight increase compared to the last financial year.

Health Insurance Subsidy Programme - Currently, there are 181,968 households registered and covered by NHIF. For the FY 2021/22, there is additional funding to cover 72,400 OVC households. The State Department for Social Protection through the Ministry of Health shared the data file of 72,400 Households (HHs) with NHIF which were subjected to IPRS verification and subsequently registered. To this end, 254,368 OVC households were covered as of 30th June 2022. A total of KSh. 368,775,878 was paid out as benefits for beneficiaries of the programme as of 30th June 2022.

Older Persons & Persons with Severe Disability Scheme - NHIF obtained the data of the 16,800 HHs from the State Department for Social Protection which was verified using IPRS and auto registered in June 2022. Accordingly, the total number of HHs covered under this programme was 58,800 HHs with a total KSh. 105,084,107 being paid out as benefits for members of the scheme on 30th June 2022.

Health Insurance for Secondary School Students (EduAfya): In the Financial Year 2021/22, a total of 3,683,654 students enrolled in the scheme at a premium of KSh. 4.4 billion.

Implementation Challenges

- Low levels of awareness on benefit packages among the beneficiaries and healthcare providers due to lack of proper documentation especially with minors, refugees, and marginalised communities.
- The attrition of principal members/ caregivers affected access to benefits for other members of the household.
- High deaths reported due to old age and health complications for older persons programme.
- Traditional and cultural practices e.g., FGM, early marriages, pastoralism, home deliveries.
- Lack of awareness and access to the NHIF Supa Cover benefit package due to unavailability of funds.
- The Elderly and Persons with Severe Disability may not be technology savvy which creates a barrier in access to information on new benefits or change of processes.

Lessons Learnt

- Collaboration between the public and private sector is crucial to the realisation of UHC.
- Constant communication and engagement remain a key element of consumer buy-in.

Recommendations

- Lobby for timely disbursement of premiums by MoH to ensure continued access to services.
- Carry out impact assessment on Linda Mama, HISP & Older Persons with Disabilities among the population.
- Lobby counties to continuously invest in health infrastructure especially Level II and III hospitals in order to promote access to preventive services.
- Enhance public awareness of Linda Mama and its benefits.

5.2.2. Medical Tourism Programme

Location: Nationwide

Objectives: To market Kenya as a hub for specialised healthcare.

Implementing Agencies: MoH, Ministry of Tourism, Mathari Teaching & Referral Hospital, KNH, and MTRH.

Project Progress:

i. ***Kenyatta National Hospital Uniportal Video Assisted Surgery:*** KNH has the capacity to conduct Uniportal Video Assisted Surgery. The specialised surgery entails a multi-disciplinary team of cardiothoracic surgeons, anesthesiologists, cardiothoracic residents and nurses. This particularly assists in enhancing medical tourism since patients can seek specialised surgical services from other county hospitals with assistance from KNH specialists. During the period, KNH conducted 15 video assisted surgeries and initiated telemedicine connectivity to Isiolo and Kitui level V County Hospitals.

ii. ***KNH Cancer Treatment Centre Phase I*:**

The project scope entails the construction of a cancer treatment centre with facilities that include consultation rooms, radiotherapy, pharmacy, laboratory, theatres, wards, administrative offices, training, research, and other facilities. As of 30th June 2022, Phase 1 works were at 97 percent completion. This included the construction of the Cancer Treatment Centre superstructure. The basement concrete works, 1st, 2nd, and 3rd floor slab concrete works are complete. Walling was completed, plastered, and finishing works were at 98 percent completion. Completion date for Phase 1 has been extended to 22nd August 2023.

iii. ***KNH Burns and Pediatrics Emergency Centre*:** This project involves construction and equipping burns management centre and paediatrics emergency centres. Project implementation was at 42 percent overall with the building works at 55 percent as of June 2022. The casting of ground, first, second and third floor slabs and beams were complete. The walling of the ground and first floors was at 15 percent completion. The project is 67 weeks behind schedule due to suspension of works twice in a period of less than two years because of delayed payments.

iv. ***300-Bed Private Hospital at KNH:*** The scope involves the design, construction, equipping and operation of a 300-bed private specialised hospital with peripheral facilities such as doctors' plaza, step-down facilities and modern multi-storey car park. The hospital is assessing a viable financing model. The hospital is awaiting the appointment of a technical advisor for the project by the PPP Directorate of the National Treasury.

v. ***KNH Hope Hostel:*** This project involves construction of an accommodation facility (hostel) for cancer patients undergoing outpatient treatment. The designs and bills of quantity have been developed and the designs approved by Nairobi City County Government. The project's partners are reviewing the agreement for signing by the National Treasury.

vi. ***Establishment of Centres of Excellence:*** During the reporting year, KNH established heart surgery, cancer treatment, diagnostics and imaging, laboratory medicine, tissue and organ transplantation, gastroenterology, diabetes and endocrinology centres. The centres of excellence in liver and bone marrow transplantation, sports medicine, reproductive health (IVF) as well as healthcare training, research and innovation centres are on-going.

vii. ***The Histocompatibility & Immunogenetics Laboratory (HLA Lab) -*** The KNH Histocompatibility: Immunogenetics Laboratory (HLA Lab) is a state-of-the-art laboratory for histocompatibility and genetic testing for solid organ and bone marrow transplantation. Launched

viii. ***Medical Camps and Outreaches at Mwai Kibaki Hospital (Formerly KNH Othaya):*** In line with Universal Health Coverage aspirations, KNH conducted 12 medical camps and outreaches covering the Mount Kenya region and its environs. This has aided in building capacity to referring facilities with a major focus on Non-Communicable Diseases. A total of 22 facilities were visited and sensitisation on improving case management for referrals undertaken. This has improved clinical outcomes for referred cases. During the year, a total of 1,911 clients were sensitised, screened and some cases referred to specialised treatment. In addition, a total of 3,553 members of the public received Information, Education and Communication materials and COVID-19 vaccination.

ix. ***Expansion of Critical Care Unit at Mwai Kibaki Hospital (Formally KNH Othaya):***

KNH renovated the Critical Care Unit and expanded its capacity from six to 21 beds. This was driven by the increased demand for CCU services against the available beds in the Central Region and its environs.

x. ***KNH Daycare Centre:*** The project involves construction and equipping the proposed Day Care Surgical Centre to house 26 beds, four theatres, an endoscopy unit, an electrophysiology room, and associated support facilities. The project was successfully completed and handed over to the Hospital on the 23rd of August 2019. It was initially operationalised as a COVID-19 Centre in 2020 and is currently being utilised for daycare theatre procedures.

xi. ***MTRH Nawiri Recovery and Skills Centre (Mental Health Services):*** This project is a novel approach to the management of mental health in Kenya and Africa in general. It is a transition home for mental health patients with 16 beds (8 male and 8 female). It integrates healthcare provision and economic empowerment and is the solution to a missing link of integration between the transition of mental health from a health facility to the community. The project was sponsored by Astellas Global Health Foundation. The Centre is expected to be operationalised and launched in the FY 2022/23.

xii. ***Equipping of Second Phase of MTRH Radiotherapy Centre of Excellence:*** Construction of the second Radiotherapy Bunker is 100 percent complete. The procurement of the Varian Radiotherapy (True Beam) machine has been done and is awaiting delivery to the site by August 2022.

xiii. ***Completion of Equipping of Intensive Care Units at MTRH:*** Expansion of ICU capacity started in 2017 and has been done annually from six to 63 ICU units. During the review period, MTRH aimed at procuring 14 ICU ventilators for the main ICU to replace the old ventilators. At the end of the financial year, the ventilators were awaiting delivery from the supplier.

xiv. ***Equipping of Shoe4Africa Children's Hospital and Mother and Baby Hospital:*** During the reporting period, the Government allocated KSh. 150 million to procure modern medical equipment for the Shoe4Africa Children Hospital and Mother & Baby Hospital. They included equipment for inpatient wards, emergency department, theatre, labour ward and neonatal ICU. Some of the equipment included paediatric ventilators, cardiac monitors, paediatric beds, digital ultrasounds, defibrillators, grafting machine, infusion and syringe pumps, x-rays machine, operating tables ECG machines, retractor sets, incubators, resuscitator, patient stretchers, and anaesthetic machine. As at the end of the financial year, the contract for delivery of equipment had been awarded to various suppliers and was at the delivery stage.

xv. ***Establishment of Magnetic Resonance Imaging (MRI) and Cardiac Catheterization Laboratory:*** The target during the financial year was to commence construction of the centre to accommodate two 1.5T MRI on the ground floor, two Cath labs on the first floor and procurement of 1.5T MRI machine. As of 30th June 2022, the tender for the construction and supply of 1.5Tesla MRI machine had been done and the contractor had done 15 percent of the construction having commenced work on 24th March 2022. The tender for the supply, delivery, installation, testing and commissioning of the 1,5T MRI had also been done.

xvi. ***Construction and Equipping of MTRH Harry J Dyer Burns Hospital:*** The Harry J Dyer Burns Hospital will be a 2 Floor, a 44-bed inpatient facility that will provide comprehensive burns services in the Western Kenya Region. This is a partner sponsored project costing US$ 2 million. As at the end of the financial year, advertisement of request for proposals for design consultancy was done but not responsive.

xvii. Construction and Equipping of MTRH Julie Anne Perry Pediatric Oncology Hospital – The oncology Hospital will be a 4-storey building with 152 beds fully dedicated to the treatment and management of pediatric oncology and will be the first such hospital in Kenya and East and Central Africa region. The project is sponsored by Shoe4Africa Foundation at a cost of US$ 2.4 million. At the end of the financial year, an advertisement of request for proposals for design consultancy was done but not responsive.

xviii. Construction of MTRH Financial Services Centre of Excellence: The project involves construction of a 3-storey building at MTRH to accommodate MTRH NHIF Branch, MTRH Shamiri Sacco on the first floor, MTRH Pension Scheme on the 2nd floor and a staff restaurant on the 3rd floor. The project commenced on 18th October 2021 and at the end of the FY, construction was at 60 percent completion.

Implementation Challenges

- Delayed disbursement of funds affected the implementation timelines of the projects.
- Non-responsive tenders resulting in re-tendering.
- Inter-dependence of other agencies on approval for the PPP projects.
- Commitment of counterpart financing for donor-funded projects.
- COVID-19 pandemic restriction measures affected the implementation timelines.
- Inability of suppliers to deliver their contractual obligations due to market price volatility.
- Global factors affecting the supply chain, particularly for goods imported from overseas. Some suppliers were forced to request extension of contract validity because of this challenge.

Lessons Learnt

- Comprehensive design should be done, reviewed and signed off by all users before commencing technical projects.
- Better collaboration among partners enhances project success.
- Business Continuity Plan is an essential business strategy for continued and uninterrupted delivery of services, especially in the event of the occurrence of unforeseen risks.

Recommendations

- Provide adequate and timely funding to facilitate timely completion of projects.
- Mobilise resources beyond the exchequer.
- Continued investment in modern infrastructure to handle emergencies or health sector shocks.

5.2.3. Health Infrastructure Programme

Location: Nationwide

Objectives: To improve access to quality health care services.

Implementing Agencies: Ministry of Health, County Governments, KEMSA, and KMTC.

Project Progress:

i. Managed Equipment Service (MES): MES investments resulted to 628,821 surgical operations performed; 392,497 dialysis sessions conducted by 54 dialysis units; 8,508 patients admitted in 14 supported ICUs; 3,848,162 digital X-ray examinations performed; 1,797,597 ultrasounds examinations, 40,840 digital mammography examinations and more Health care workers trained to provide services in a conducive environment with the specialised equipment.

ii. ***Integrated Molecular Imaging Centre***: Kenyatta University Teaching and Referral Hospital launched, equipped, and operationalised its Integrated Molecular Imaging Centre serving approximately 7,500 patients since commissioning in October 2021 and continues to serve about 1,500 patients per month.

iii. ***Kenyatta National Hospital Cancer Centre of Excellence***: Phase 1 of the project is at 97 percent completion. The site for construction of second additional bunkers has been handed over to the contractor where works will commence in July 2023.

iv. ***KMTC Campuses***: KMTC increased the number of campuses from 64 in 2017 to 74 in 2021 in 44 out of 47 counties thus increasing the student enrollment population from 12,605 students in 2017/2018 to 16,664 in the year 2021. The College constructed halls of residence in 65 KMTC campuses. Through PPP, the College acquired state-of-the-art equipment for specialised training and practical experience.

v. ***Construction of New KMTCs in Mandera, Voi and Lamu***: The construction of tuition blocks at Mandera Campus was 90 percent completed. The hostels at Mandera Campus were 95 percent complete. Voi Campus was operational after the completion of the First Phase of construction. The construction of Taita Taveta Campus was complete and operational. The refurbishment of classrooms, office block, library, skills lab, and ladies' hostels in Lamu Campus was complete. At Teso Campus, Phase 1 of the three-storey building with a capacity of 40 students was completed.

Picture of KMTC Taita Taveta Campus

vi. ***KMTC Centres of Excellence:*** The College planned to establish 10 Centres of Excellence (CoE). The first CoE to be established was at Karen Campus, where the following nutrition courses were offered: Higher Diploma in Renal Nutrition, Diploma in Nutrition, Upgrading Diploma in Nutrition and Certificate in Nutrition. Through partnership, the College expanded the infrastructure for teaching and learning at the Campus, including the construction of a tuition block. To increase the pool of skilled health professionals, KMTC introduced the following specialised trainings, Certificate in Community Mental Health for Community Health Workers and Community Health Volunteers, Higher Diploma in Addiction Science, Higher Diploma in Clinical Medicine in Mental Health and Psychiatry, Higher Diploma in Nursing Mental Health and Psychiatry, Diploma in Mental Health and Psychiatry, and Diploma in Health Counseling.

vii. ***KEMSA's Ultra Cold Chain Equipment***: The Ministry through KEMSA procured 17 Ultra Cold Chain Equipment which was distributed to the national and regional depots.

viii. ***Renovation of KEMRI Laboratories:*** During the period under review, KEMRI renovated four state-of-the-art laboratories namely Centre for Biotechnology Research and Development, Centre for Microbiology Research, Centre for Virus Research and the Centre for Traditional Medicine and Drug Research that was supported by the United States Government through the Defense Threat Reduction Agency. The project was completed and will be commissioned in the next financial year. The Institute also established the Centre for Community Driven Research, Kirinyaga Level I Laboratory for routine laboratory services, office space and Centre for Disease Control & Surveillance, Mandera, a COVID-19 Molecular Laboratory.

ix. ***Integration of Enterprise Resource Planning System at KMTC*****:** The integration of an Enterprise Resource Planning (ERP) System at KMTC during Phase 3 involved the onboarding of KMTC's 43 campuses out of a total of 74 campuses. The project aimed to modernise and optimise operational processes across the KMTC network. Key elements of this Phase included planning and preparation, system deployment and configuration, data migration, training and capacity building, integration and testing, and go-live and support.

Implementation Challenges

- Some health facilities face challenges utilising equipment due to lack of uninterrupted electricity.
- Non-availability of clean, reliable water in some health facilities for theatre and renal services.
- Inadequately trained personnel operate the equipment in some counties, especially for ICU, renal, and radiology services.
- Delays in initiation and completion of some projects due to inadequate budgetary allocations.
- Variation of works due to cost fluctuations mainly caused by COVID-19 pandemic.
- Wastewater and sewage treatment is a challenge, and the soak pits saturation is high due to the prevailing soil conditions.
- Tailoring the ERP system to meet the specific needs and requirements of each campus.
- Limited financial resources, staffing constraints and competing priorities hindered the implementation and

rollout of the ERP system.

- Data Migration: Data migration requires a thorough analysis of the data to be migrated, and it should be done accurately to avoid data loss or errors.
- Integration: Integration of ERP with other systems like Customer Relationship Management, Supply Chain Management, Human Resource Management, and others may pose significant challenges.
- Customisation of the ERP software can be a challenging task and may require a significant amount of time and resources. It also requires timely cooperation of the vendor.
- Getting waiver/raising VAT funds which initially were not available in KEMRI.

Lessons Learnt

- Investment in health infrastructure remains insufficient to meet the national demand for quality health services.
- There are still key barriers that hamper the successful installation and implementation of certain projects.
- Delays in project implementation/ delivery can easily result in variation.
- Phased projects pose deterioration if completion of subsequent phases is not fast-tracked.
- It is crucial to involve the management in the implementation process to ensure its success.
- Enhance procurement processes.

Recommendations

- Ensure sufficient budgetary allocation to facilitate initiation and timely completion of projects, and acquisition of crucial equipment.
- Outstanding works to be completed for optimal functionality.
- Enhance staff capacity through training.
- Conduct feasibility studies to assess project viability, including identifying possible hindrances to project's success.
- Ensure proper security measures to protect the organisation's data.
- Plan for customisation and identify the areas where customisation is needed and plan accordingly.
- Official handing over should be initiated, and the contractor be discharged to allow KMTC to proceed with maintenance works.
- Focus on data management to ensure that data is accurate, complete and up to date.
- KMTC should construct more classrooms, hostels and a well-established and equipped Administration Block.
- Conduct a thorough business process analysis before ERP implementation. This analysis will help in identifying the requirements and needs of the organisation hence the right ERP software.
- Enhance innovation and research output through commercialisation.
- Well-designed sewerage treatment plant/facility to be considered.

5.2.4. Community High Impact Interventions Project

Location: Nationwide

Objectives: To implement high impact health interventions in line with the existing community health strategy in ICCM; strengthen community health units to promote healthcare interventions; Scale-up Nutrition Intervention at community level; and use community health workers to scale up health insurance coverage.

Implementing Agencies: National Aids Control Council, and Ministry of Health.

Project Progress:

i. ***National Integrated Community Case Management:*** During the period under review, 32 out of 47 counties had 12,000 community health volunteers trained on ICCM. In addition, five Neonatologists, three Neonatal Fellows, nine Neonatal Nurses, 16 Nurses and 38 Paediatricians were trained. The number of community health assistants trained was 700 while community health emergency workers trained was 52.

ii. ***Strengthen Community Health Units:*** Functional community health units (CHUs) established were 8772. The target was surpassed because most of the CHUs were uploaded on the Kenya Master Community Health Unit listing.

iii. ***Scale-up Nutrition Intervention at Community Level***: In 2021, the estimated proportion of children under one year who were fully vaccinated with all the life saving routine infant vaccines was 82.3 percent from 72.8 percent in 2016. Vitamin A supplementation coverage has improved from 67.4 percent to 86.3 percent in 2021 against a national target of 80 percent. Out of 7.22 million children under the age of five, approximately 2.6 million children are undernourished; and four percent are overweight or obese. Micronutrient deficiencies of iron, folate, iodine, and Vitamin A are also widespread, with 42 percent of pregnant women and 26 percent children between 6 and 59 months being anaemic (KNMS, 2011). Iron and folic acid supplementation coverage was at 80 percent. Breast Milk Substitutes (General) Regulations 2021 were developed and came into force on 30th May 2022. The number of children between 6- and 23-months receiving Micronutrient Powders was 291,459. The number of healthcare workers trained on high impact nutrition interventions was 1,150 while the number of community health volunteers trained in key nutrition practices at critical stages in the life cycle was 70,000.

iv. ***High Impact Nutrition Interventions (HINI) implementation in ASAL Counties:*** The Ministry is promoting HINI, including integrated management of acute malnutrition in the 23 ASAL counties. Over 3,500 facilities are implementing HINI. The Ministry developed a multi-sectoral Kenya Action Plan on Child Wasting in 2020 ***https://www.childwasting.org/***. The Plan outlines priority multi-sectoral interventions for accelerating reduction of child wasting by the year 2030. Additionally, the Kenya Nutrition Scorecard which is aligned to the Africa Continental Nutrition Accountability scorecard was developed and rolled out to the counties.

Implementation Challenges

- Reliance on donor support brings sustainability of programmes into question.
- MTP III focus on HINI in the community was a limitation in terms of resource mobilisation and coverage across the scope of nutrition service delivery (preventive, promotive, curative, and rehabilitative.
- Stock out of the registers and reporting tools.

Lessons Learnt

- Need to mobilise internal resources.
- The significance of incentivising community health volunteers to help realise community interventions.

- Over-reliance on donors to help finance the community interventions creates challenges of implementation and sustainability.

Recommendation

- The triple burden of malnutrition (undernutrition, micronutrient deficiencies and overnutrition) and reduced donor funding requires increased GoK investment in nutrition (as part of a transition plan) with a lifecycle approach, at all levels of healthcare.

5.2.5. Digital Health Programme

Location: National

Objective: Upgrade of Kenya Health Information System (KHIS) 2, Kenya Master Health Facility List (KMHFL) and healthcare workforce capacity building to facilitate timely reporting to inform healthcare planning, resource mobilisation and allocation, and prevention of communicable and non-communicable diseases.

Implementing Agency: MoH

Project Progress: During the period under review, the following achievements were observed; institutionalisation of health systems - KMHFL, KHIS, Integrated Service Desk and MoH Virtual Academy; and establishment of critical health information systems ChanjoKe, DamuKe (Blood Management Information System) and Oxygen Health Management Information System; operationalisation of the National Health Data Centre. Similarly, The Ministry developed the Kenya Interoperability Framework for Data Exchange among digital platforms; National Unique Patient Identifier; harmonised Data Capture (Registers) and Summary (Reporting); reviewed standards for electronic medical records; and developed a Telemedicine Policy (draft); and e-Health Bill (draft).

Implementation Challenges

- Coordination challenges due to financial and administrative constraints since responsibility for health data is often divided among different ministries or institutions. For example, counting births and deaths – a basic building block of a health information system is generally undertaken by the Ministry of Internal Interior and Coordination of National Government.
- Inadequate information flows from the National Government to the facility as counties do not have ICT equipment infrastructure to support paperless reporting.
- Shortage of ICT support personnel.

Lesson Learnt

- Digital health is vital in the successful implementation of UHC hence a lot of effort should be made to ensure that health has a robust digital space.

Recommendations

- Upgrade KHIS Tracker to a higher version for optimal use of the system.
- Enhance the KMHFL system and upgrade to a registry.
- Develop and adopt a unified Health Management Information System that collects information from end-to-end processes.
- Enhance the KHIS aggregate and review integration with other data systems such as KMHFL, TIBU etc.
- Capacity building and technical support to counties on the National Health Information System.
- Review data collection and reporting tools guided by the Kenya Health Sector Strategic Plan.

- Disseminate revised data collection and reporting tools to the sub-national level.

5.2.6. Human Resource for Health Programme

Location: Nationwide

Objectives: To address capacity gaps within specialised and sub-specialised areas in the health sector.

Implementing Agencies: KMTC, MoH, and County Governments.

Project Progress: In the review period, the country had 80,867 healthcare workers in public health facilities across the 47 counties excluding those working at KNH, MTRH, Semi-Autonomous Government Agencies, Kenya Prisons Service, and CHVs of which 43,117 (53.3 percent) are female and 37,750 (46.7 percent) were male.

Registered Health Professional Trends

The table below shows the densities per 10,000 population of registered health professionals by cadre in 2021. The density of registered nurses was highest at 15.59 in 2021, followed by enrolled nurses and clinical officers who were 7.86 and 4.97, respectively.

Table 5.1: Number of Registered Health Professional Trends

Health Personnel	Number	Density per 10,000 Population
Medical Officers	13,376	2.71
Dentists	1,396	0.28
Pharmacists	4,285	0.87
Pharmaceutical Technologists	12,036	2.44
Graduate Nurse	9,112	1.85
Registered Nurses	76,878	15.59
Enrolled Nurses	38,776	7.86
Graduate Clinical Officers	896	0.18
Clinical Officers	24,481	4.97
Public Health Officers	6,887	1.40
Public Health Technicians	1,664	0.34
Laboratory Technologies	15,635	3.17
Laboratory Technicians	4160	0.84
Nutrition and Dieticians	4235	0.86
Nutrition & Dietetic Technologies	6340	1.29
Nutrition & Dietetic Technicians	1046	0.21

Source: Economic Survey 2022

The sector initiated the Enrolled Community Health Nursing programme at KMTC between 2016/17 and 2021/22. The project targeted needy but qualified students from ASAL counties and other hard to reach areas. The aim was to increase the production of competent healthcare professionals to mitigate the shortage of human resources for health and meet Kenya's goal of improving maternal and child health indicators in these regions. KMTC, in collaboration with the Ministry of Health, the World Bank and Beyond Zero, provided full scholarships to 1,324 students drawn mainly from the Vulnerable and Marginalised Groups and other minority populations. The nurse midwife students were trained in eight campuses, namely, Lodwar, Kapenguria, Kabarnet, Bomet, Loitoktok, Kitui, Kilifi and Msambweni. The campuses are located as near as possible to the ASAL regions. During FY 2021/22, 103 additional students graduated bringing the total graduates to 1,148 out of 1,324. Over 50 percent of the project graduates are offering primary healthcare services in their home counties to contribute to improved maternal and child indicators in the hard-to-reach areas.

With support from the County Governments and the NGCDF, KMTC was able to increase the enrolment of students within its campuses from 16,664 in 2020/21 to 21,760 in 2021/22.

During the 2021/22 academic year, the College increased its capacity to train healthcare workers in specialised and sub-specialised programmes. In the year under review, the College offered 41 Higher Diploma Programmes and 11 short courses. The Higher Diploma programmes had a total of 692 graduates.

Implementation Challenges

- Fragmentation of human resources for health (HRH) data in various systems leading to reporting challenges.
- Difficulties in getting inventory on health workers from private health facilities which hinder proper policy making and/or poor planning.
- Lack of a health worker's recruitment model that is cost-efficient, especially for specialists.
- Some counties were not linked to or did not update on iHRIS leading to inaccurate and incomplete HRH data and a lack of data to guide recruitment processes.
- Lack of proper placement or rational skill mix across all levels.
- High numbers of staff are retiring: - counties, therefore, need to undertake a succession management plan for all the employees in the health departments to bridge the gap.
- Lack of HRH policy on inter-county governments transfer, and between counties and the National Government and lack of standard/ guidelines for sharing or managing specialists.
- Lack of HRH attraction and retention strategies, especially in the Northern Frontier and North Rift counties.
- The project design did not anticipate students failing to complete within the project timeline. Supplementary budgets were requested to cater for students who had to retake their exams.
- Inadequate funds to support students who repeated classes more than once.
- The COVID-19 pandemic disrupted learning for almost a year leading to delay in graduation for students.
- Insufficient number of clinical sites approved by the relevant regulatory bodies.
- Inability to expand academic programmes due to inadequate lecturer to student ratio.
- Some hospitals charged facility utility fees which denied clinical training experience to many students from socially disadvantaged backgrounds.
- Due to the increased workload, some of the counties face challenges in honouring training admissions.
- Insufficient teaching and learning infrastructure especially for teaching laboratories.

Lessons Learnt

- There is a high demand for healthcare workers, but funding remains a critical concern to help bring the gap.
- Project design should be planned for students who fail to complete studies within the stipulated time.
- Digital transformation is essential in enhancing access to training.
- Innovative financing is required to meet the human resource shortfall in the health sector.
- Collaboration can increase access to training (regulatory bodies, County Governments and National Government).

Recommendations

- Develop an integrated human resource information system for its health workforce to strengthen human resource for health information system (HRHIS) to generate high quality information and evidence to guide in policy decisions.
- The National and County Governments should develop guidelines and protocols for HRH transfers/movements.
- Developing a package to attract and retain specialist healthcare workers, especially in the counties of the Northern Frontier and North Rift, should be developed.
- National and County Governments should collaborate in the management of training and placement (distribution) of specialists.
- Establish programmes to facilitate student enrollment, retention and completion.
- Develop and maintain a master registry that is interoperable with the Integrated Human Resource Information System to get real-time health workforce data from the public and private sectors.
- Use Workload Indicators of Staffing Needs to inform rationalisation, recruitment, and training of adequate technical staff (numbers and capacity) to address the shortages of HRH.
- Leverage technology and innovation, i.e., tele-health to address shortages, imbalances and training.
- Additional funding and resources to train more students.
- County Governments should undertake a succession management plan for all the employees in the health departments to bridge the gap
- Provide training equipment, materials and vehicles to facilitate smooth training of students
- Review and update the human resource norms and standards.

5.2.7. Quality of Care/ Patients and Health Workers Safety Programme

Location: Nationwide

Objectives: To improve the care and safety of patients.

Implementing Agencies: MoH and County Governments.

Project Progress: ***AMR Surveillance:*** 12 surveillance sites were connected to the Antimicrobial Resistance (AMR) surveillance network of which seven surveillance sites were reporting to the AMR Central Data Warehouse at the National Public Health Laboratories. Further activation of reporting systems to the Warehouse for the remaining five sites was underway. All 47 counties were trained on Kenya Quality Model for Health (KQMH) for quality-of-care improvement and assessment of quality of care using the electronic KQMH tool.

Surveillance for COVID-19 - Public Health Emergency Operations Centre (PHEOC): PHEOC with support from GIS-CDC trained a total 72 county Emergency Operations Centre staff on public health emergency management from 17 counties and set up and equipped a total of 20 PHEOC in 18 counties, and at JKIA and Kenya Prisons Service Headquarters. In FY 2021/22, a total of 115 public and private laboratories had the capacity to conduct confirmatory (PCR) tests and 472 laboratories had the capacity to do Rapid Diagnostic Test for COVID-19. It coordinated distribution of 24,283 complete Personal Protective Equipment kits to healthcare workers responding to COVID-19 pandemic in FY 2021/22.

Implementation Challenges

- Weak surveillance system for effective programme monitoring, prevention and control of infectious disease outbreaks and epidemics.
- Inadequate human resources.

Lesson Learnt

- There is a high antimicrobial resistance increasing the risk of disease spread, severe illness and death.

Recommendation

- Sufficient budgetary allocation to help create robust surveillance systems, hiring and training health care workers on disease surveillance.

5.3. ENVIRONMENT, WATER, SANITATION AND REGIONAL DEVELOPMENT SECTOR

The Environment, Water, Sanitation and Regional Development Sector has an important role in ensuring the sustainability of natural resources in the country. The Sector seeks to *"enhance a clean, safe and sustainable Environment to Access Water and Sanitation Services"* It is also aligned to the relevant SDGs, African Union's Agenda 2063 and other regional development initiatives. During the review period, the Sector focused on conservation and management of forests, wildlife resources, water catchments, and management of wetlands; restoration of degraded land, green economy, waste management, pollution control, integrated regional development, water resources management, increasing access to water and sanitation; and mitigation and adaptation to the effects of climate change among other programmes.

5.3.1. Waste Management and Pollution Control

Location: Nairobi, Mombasa, Nakuru & Kisumu

Objective: To improve solid waste management in urban and rural areas.

Implementing Agencies: NEMA, and Ministry of Environment and Forestry.

Project Progress: Mombasa and Kisumu waste management dump sites were monitored during the period under review. The decommissioned Kibarani dumpsite was maintained by a private stakeholder in Mombasa. Waste handlers were engaged at the new site, Mwakirunge in Mombasa. Waste including plastics was burnt at Kachok dumpsite in Kisumu. 89 open solid waste disposal sites were assessed on compliance to the 10 minimum points in all 47 counties. 24 dumpsites have not met any of the criteria; two sites at Level 1; 17 sites at level 2; 15 sites at Level 3; seven sites at Level 4; six sites at Level 5; 12 sites at Level 6; two sites at Level 7; one site at Level 8; two sites at Level 9; and one site at Level 10 (Tharaka Nithi).

Implementation Challenges

- Inadequate capacity of County Governments to manage waste.
- Conflict in location of waste sites vis-a-vis other stakeholders.
- Contraband trade and entry of banned plastics at border points.
- Some of the alternative materials have become eyesore in the environment as not biodegradable as envisaged and poor disposal.
- Inadequate exchequer for continuous inspections and enforcement.

Lessons Learnt

- For devolved functions, capacity needs to be built before handing over.
- Long-term planning for waste management systems should be put in place for all urban areas to avoid future conflicts.
- Enforcement should be regular and sustained.
- Public support is key to ensure success of eliminating the use of banned plastic bags and source of information.

Recommendations

- Build the capacity of County Governments to manage waste.
- Source funding for modern waste management technologies and practices.
- Waste management is a devolved function and will require County Governments to invest in required infrastructure.
- Promote a circular economy (material recovery and recycling).
- Enhance collaboration with County Governments and multi-agency approach.
- Provide funds for sustained enforcement and for undertaking rapid results initiatives.

5.3.2. Modernisation of Meteorological Services Programme

Location: Nationwide

Objective: To integrate emerging technologies into the improvement of provision of meteorological services and information for early warning for all.

Implementing Agency: Kenya Meteorological Department (KMD), and Ministry of Environment and Forestry.

Project Progress: The expansion and automation of data collection network and weather observing systems were installed, tested and accepted in January 2022. Factory Acceptance and Factory Training were conducted, equipment delivered and civil works/installations in 24 counties completed. Inspection, testing, and acceptance were completed, and instruments were delivered; installations, inspection and acceptance of the data exchange and telecommunication system were completed. The project was at 82 percent completion rate.

Implementation Challenge

- Budget cuts and delayed exchequer releases.

Lesson Learnt

- Early commencement of tender processes minimises supplementary budgets.

5.3.3. Rehabilitation and Protection of the Water Towers

Location: Maasai Mau, Kieni Forest, Maragoli Hills, Shimba Hills, Museve-Kavonge Hills, Elgeyo Hills, Gwasi Hills, Taragwiti Hills, and Badasa.

Objective: To rehabilitate and restore the degraded areas within five water towers and other selected areas.

Implementing Agencies: Kenya Water Towers Agency, Kenya Forest Service, Kenya Forestry Research Institute, KWS, and Ministry of Environment and Forestry.

Project Progress: During the financial year the following was achieved: 706 Ha was rehabilitated in various sites across the country namely, Kieni Forest (40Ha); Maragoli Hills (20Ha); Shimba Hills (25Ha); Museve-Kavonge Hills (50Ha); Elgeyo Hills (55Ha); Maasai Mau (25Ha); Gwasi Hills (30Ha); Taragwiti Hills (20Ha); and Badasa (20Ha). Launched and disseminated water towers status report for 15 water towers namely, Cherangany; Chyulu Hills; East Mau; Southwestern Mau; Elgeyo Hills; Endau Hills; Gwassi Hills; Kirisia Hills; Makuli-Nzaui Hills; Mt. Elgon; Mwangea Hills; Namanga Hills; Nthangu-Kitondo Hill; Nyambene Hills; and Shimba Hills. Undertook assessment of two water towers namely: - Kavonge-Museve Hills and Loima. Fenced 30km of Maasai Mau fence. Continued to co-ordinate the protection of 142,601 Ha in the Mau Forest Complex in containing water towers destruction, encroachment, and illegal extraction of water towers resources. Relocated two JEU camps (Kabarak and Erenet) from the forest to the fence boundary to enhance protection of the fence project. Recruited 20 community scouts engaged in protection of the fence project which has strengthened community engagement and ownership of conservation activities. Conducted capacity building on apiary establishment and management for three groups i.e., in Kiptogot CFA, Gwassi Hills CFA and Nkaroni Beekeeping Self-Help Group (South Rift Region). The demonstration of rehabilitation technologies for the water towers (No. of technologies and hectares established) was 100 percent achieved. Mangrove forest planting in Lamu, Kilifi and Mombasa were done on 18ha out of 20ha (90 percent). Kenya Forest Service established 421Ha of bamboo forests. Aberdare (38.2), Mau Forest Complex (60.55), Cherengany Hills Forest (84.9), Mt Elgon Forest (173) and Mt Kenya Forests (64.3).

Established demonstration plots for rehabilitation of water towers. These sites are adopted and maintained for training and learning on natural forest rehabilitation and restoration approaches, opportunities, and challenges, among others. During the period under review, 15 ha of demonstration plots were established in Maasai Mau. Further, a 23-ha demonstration plot was established in River Sabaki, Kilifi County. This target was 100 percent achieved.

Implementation Challenges

- Increase in the intensity and frequency of extreme weather events such as prolonged periods without rainfall.
- Inadequate budget and budget cuts have affected the implementation of planned activities hence achievement of indicators.
- Inadequate community support, especially in the implementation of

projects on the protection of forests and water towers where they live or derive their livelihoods.

Lesson Learnt

- Active stakeholder engagement is essential to the success of projects. More sensitisation should be done to communities living around water towers.

Recommendation

- Increased funding for Vision 2030 projects.

5.3.4. Strengthening Environmental Governance

Location: Nationwide

Objectives: To provide enabling policies, legislation, and institutional arrangement.

Implementing Agencies: NEMA, and Ministry of Ministry of Environment and Forestry.

Project Progress: Processed and issued 12,339 licences for regulated facilities: 9,029 EIA licences; 1,615 effluent discharge licences; 391 air quality licences; and 1,304 waste management licences.

Implementation Challenge

- Inadequate funds to ensure all sites are visited and monitored.

Lesson Learnt

- Public participation in the EIA process is critical to ensure environmental issues are addressed.

Recommendation

- Enhanced funding required to facilitate the Authority.

5.3.5. Advertent Weather Modification Provides High Level Achievements

Location: Nationwide

Objectives: To aid in the mitigation of adverse impacts of severe weather and extreme climate events.

Implementing Agencies: KMD, and Ministry of Environment and Forestry.

Project Progress: Quotation to equip the weather modification operations and research centre were floated. Construction of the weather modification cloud physics laboratory – system installed, tested, and commissioned**.** The project was at a 21 percent completion rate.

Implementation Challenge

- Budget cuts and delayed exchequer releases.

Lesson Learnt

- Early commencement of tender processes minimises supplementary budgets.

5.3.6. The Plastic Bags Initiative

Location: Nationwide

Objective: To continuously monitor compliance, enforcement and stakeholders' engagements on the total ban of plastic bags.

Implementing Agencies: NEMA, and Ministry of Environment and Forestry.

Project Progress: 561 surveillance inspections and 80 enforcement actions done in all counties targeting vendors, importers, border points of the plastic ban, manufacturers. Developed the National Marine Litter Action Plan and sensitised

20 stakeholders. 43 counties sensitised on plastic pollution control by the County Directors of Environment through the County Environment Committee 's Forum.

Stakeholders' engagement during the 2022 world clean-up day in Kwale targeting plastics and marine pollution.

Seized banned plastic bags.

NEMA received a prestigious award under the United Nations Persons of the Year (2022) category, in recognition of the effort in promoting and safeguarding the environment in Kenya and vehemently working towards enforcement of the plastic bags ban. The survey of FY 2020/21 rated achievement at 56.6 percent reduction and another survey is planned for the FY 2023/24.

Implementation Challenges

- Contraband trade and entry of banned plastics at border points.
- Some of the alternative materials have become eyesore in the environment as not biodegradable as envisaged and poor disposal.
- Inadequate exchequer for continuous inspections and enforcement.

Lessons Learnt

- Enforcement should be regular and sustained.
- Public support is key to ensure success of eliminating the use of banned plastic bags and source of information.

Recommendations

- Enhance collaboration with County Governments and multi-agency approach.
- Provide an exchequer for sustained enforcement actions.

5.3.7. Rehabilitation of Urban Rivers

Location: Nairobi River Basin, Eldoret – Sosian River, and Kisumu – Kisat River

Objective: To rehabilitate and protect riparian areas in urban areas.

Implementing Agencies: NEMA, and Ministry of Environment and Forestry.

Project Progress: Maps of pollution sources in Nairobi River Basin, Eldoret and Kisumu were updated; 23 point sources of pollution identified, five number of Restoration and Improvement Orders issued, two areas of encroaching structural developments identified and marked for demolition for Nairobi River Basin, seven sources point of pollution identified, and two Restoration and Improvement Orders issued for Kisat River in Kisumu; maintenance of rehabilitated areas at Michuki Park and Museums continued; mobilised 22 stakeholder (youth) on the cleanup of Athi-Sabaki River; awareness material on urban river restoration, flyer developed and disseminated; monitoring of the 1,000 indigenous trees planted in October 2021 for rehabilitation and beautification of River Nyongara near Kikuyu.

Implementation Challenge

- Several structures were marked for demolition. Forceful removal of structures might not be feasible unless they are led by the Ministry of Interior and Coordination of National Government.

Lesson Learnt

- Regular and adequate funding is required if the objective is to be met.

Recommendation

- Need to embrace a multi-agency approach for approval of developments near rivers and enforcement.

5.3.8. Promotion and Piloting of Green Energy

Location: Nationwide

Objective: To promote adoption of renewable energy and renewable energy technologies in Kenya at household levels.

Implementing Agencies: Ministry of Environment and Forestry, and National Environment Trust Fund (NETFUND).

Project Progress: NETFUND supported the entrepreneur to develop and scale Magiro Hydro Electricity Ltd (MHEL) and to acquire an investor to scale up generation of hydroelectricity. The firm now provides affordable clean energy to over 500 households. In addition, NETFUND has secured a donation of 0.5MW hydropower containerised equipment that will serve more than 20,000 persons and connect businesses and factories in rural Murang'a. NETFUND has also supported the Centre for Innovation Science and Technology based in Siaya County to produce biofuel from water hyacinth. The use of water hyacinth as a raw material is advantageous because it reduces waste on Lake Victoria, is cheap and does not produce harmful emissions when burnt. The innovation currently produces 600 litres of biofuel per month, and it is serving customers in Siaya, Kakamega and Busia counties.

Green Innovations Award Programme: The Fund developed the Fourth Phase of the Green Innovations Award (NETFUND GIA) with an aim of identifying, recognising, and awarding best practices during the MTP III period. The Fund was able to award 21 outstanding projects and incubate nine green innovations in partnership with E4Impact through provision of business and technical support services. Additionally, the Fund partnered with KeNIA to commercialise seven innovations through financial support and technical assistance.

Implementation Challenges

- Hydrobox development project was delayed due to the COVID-19 pandemic.
- Postponement of the launch of the programme due to the MoH COVID–19 restrictions on movement and social interactions.

Lessons Learnt

- The Partnership between NETFUND and MHEL has established a PPP to establish mini grids in Central Kenya. This partnership has promoted the Government's agenda to increase access to electricity in rural areas through possible replication.
- Enhanced and timely publicity of activities with a key focus on avenues that reach the target audience to ensure their inclusivity. The importance of the private sector in the promotion and financing of innovations.

Recommendations

- Promote PPPs to realise development goals.
- Embark on an aggressive fundraising campaign and identify effective follow-up and communication strategies for development partners, private sector, and other government agencies.

5.3.9. Forest Conservation and Management

Location: Nationwide

Objectives: To increase forest cover from 7.24 percent in 2016 to 10 percent in 2022.

Implementing Agencies: Kenya Forest Service, Kenya Forestry Research Institute, and Ministry of Environment and Forestry.

Project Progress: During the period, forest cover increased from 4,285,853.91 hectares or 7.24 percent of the country's land area to 5,226,356.42 hectares or 8.83 percent. This area includes 2,605,352.88 hectares of gazetted public forests which are all protected and conserved for their ecological, socio-cultural, educational, research and economic functions.

Further, the Kenya Forest Service spearheaded county-wide monthly tree planting campaigns throughout the period during which 30 million tree seedlings were planted on 14 thousand hectares. As a result of the concerted efforts by the Kenya Forest Service together with the support of the state agencies and the private sector actors and in addition to the previous years' work, the national tree cover is now established to be well past the minimum constitutional requirement of 10 percent of the county's land area. During the reporting period, 29,831,234 tree seedlings were planted translating to 14,700.4 Ha of land that was initially degraded or with minimal vegetative cover. In addition, the Service with the support of stakeholders, established 2,148 Ha of Mangrove forests, rehabilitated 48,000 Ha through fencing of degraded forest areas on gazetted public land in the counties of Nyandarua (Ol Bollosat and Ndaragwa Forest Stations); Nakuru (Bahati and Likia Forest Stations); and Kericho (Londiani and Kericho Forest Stations).

Fencing of degraded forest areas on gazetted public land in the counties of Nyandarua (Ol Bolossat and Ndaragwa Forest Stations)

In the same period, the Kenya Forest Service sustained surveillance operations on the 55,884.5 Ha of public forest land reclaimed from illegal settlements. Among the areas reclaimed and contingent of security personnel were deployed throughout the period are: 13,368 Ha in Maasai Mau Forest Complex; 256 Ha in Makunga Forest Block in Saboti Forest Station of Trans Nzoia County; 30,000 Ha in Leroghi/Kirisia Forest in Samburu County; 7,000 Ha at Cheptais in Mt. Elgon Forest in Bungoma County, and 263 Ha in Cherengany Hills Ecosystem (225 Ha in Elgeyo Marakwet and 38 Ha in Uasin Gishu counties).

Collected 38,716 kgs of tree seeds of various species. This was 82 percent achievement of the set target during FY 2021/22. The tree seed source acreage was increased by 96 Ha through establishment of seed stands and seed orchards and thus was 98 percent achievement against the target. Tree seedlings amounting to 1,100,000 were raised in tree nurseries and 57,696 planting materials for difficult to propagate indigenous tree species were propagated. Nine capacity building activities were conducted by partners and communities for adoption and upscaling of forestry technologies for environmental conservation and livelihood empowerment. Dissemination of forestry technology and information for adoption and up scaling forestry development through 34 field days held across the country.

Implementation Challenges

- Inadequate manpower for forest operations, protection and security.
- Inadequate financing for tree growing to support forest conservation and management.
- Slow uptake by county governments of the devolved forestry functions to contribute to forest conservation.
- Unreliable weather patterns affect regeneration efforts.
- Shortage of quality seeds affect the desired mass production of seedlings for the different ecological zones.
- Forest fires, pests and diseases affect the young trees.
- Prolonged delays in funds disbursements for project implementation.

Lessons Learnt

- There is synergy in the use of a multi-agency approach towards protection of forests in areas with heightened incidents of insecurity.
- Species diversification with appropriate site matching in tree growing increases chances of tree survival contributing to forest cover at faster rate.
- Promoting the growing of bamboo across the different landscapes offers dual opportunities for accelerating the national drive towards increasing the forest cover to a minimum of 10 percent of the landscape and the development of cottage industries for bamboo products-based enterprises.
- Commitment by the political leadership is crucial for successful conservation and in the attainment of the desired level of forest cover.

Recommendation

- There is a need to bring on board more partners and strengthen partnerships with County Governments, development partners and other stakeholders in forest development and conservation.

5.3.10. Forest Research and Development

Location: Nationwide

Objective: To develop forest research technologies for sustainable management of forest and allied natural resources.

Implementing Agency: KEFRI

Project Progress: KEFRI developed and disseminated a total of 66 research technologies. There was an increase in tree seed source acreage by 95 Ha and raised 287,500 planting materials of difficult-to-propagate indigenous tree species. The sub-sector rehabilitated 3,600 Ha of Maasai Mau Water Towers through aerial seeding and developed a method of managing three invasive tree species (Cestrum, Dodder, and *Ipomoea* species). Thirty-eight publications were done through peer review journals, technical notes, policy briefs and guidelines. Information on forestry research was also disseminated through 13 media outlets including print and electronic media as well as through 38 field days. Research & development was strengthened through partnerships and linkages by signing five MoUs with partners. Eighteen resource mobilisation concepts were developed and submitted to various donor agencies for funding. Nine non-timber forest products were developed during the financial year.

Implementation Challenges

- Inadequate resources; a ban on the use of polythene tubes for seedling production in our tree nurseries.
- There is a low uptake of forestry technologies due to their long-term nature of investment.
- Threats from pests and diseases on commercial forestry.
- Emerging challenge of invasive species in various ecosystems requiring quick solutions.

Lessons Learnt

- High demand for quality tree seeds requires an increased acreage of seed sources to meet the demand for the provision of quality and quantity seeds.
- Domestication of indigenous species requires their propagation protocols for use by nursery owners to raise enough planting materials for indigenous tree planting campaigns towards 10 percent tree cover.

Recommendations

- Adequate allocation and diversification of resources base.
- Establishment of adequate infrastructure for tree seed collection, testing and disbursement.
- Invest in new technologies and research.

5.3.11. Wildlife Conservation and Management

Location: Nationwide

Objective: To protect and conserve wildlife resources.

Implementing Agencies: State Department for Wildlife, and KWS.

Project Progress:

Securing Corridors/Registration of Conservancies: Naivasha – Hells Gate – Longonot – Lake Nakuru, Nairobi National Park – Swara Conservancy, Southern Kenya Rangeland (Amboseli National Park – Kimana – Chyulu National Parks, corridors/dispersal areas were identified and mapped. 15,000 Ha in Laikipia and 2,000 Ha in Ngong (sheep and goats) as migratory dispersal corridors.

Parks Secure through Fencing: Constructed 23km fence in Meru Park, 25.5km in Mt. Kenya and 9km in Ruma National Park. 7km in Lake Nakuru National Park rehabilitated. 395km Aberdare National Park, 235.5km of Mt. Kenya, and 52km of Marsabit National Park maintained. A total of 1,156km maintained in other parks.

Modern Anti-Poaching Technologies Deployed: Digital radios telecommunication implemented. Human intrusion detection system. Assorted security equipment was procured including 166 body armors, 166 ballistic helmets and 15 security cameras. Earth ranger system for tracking and monitoring wildlife. Training of rangers and wildlife security officers. Construction and operationalisation of wildlife forensic and genetic laboratories to aid in successful prosecution of wildlife crimes.

Implementation Challenges

- Inadequate funding and lack of specific budget for the flagship projects and cross-sectoral funding challenges.
- Human-wildlife conflicts are increasing the requirement for wildlife barriers.
- Sophistication of poaching and illegal wildlife trade and trafficking.
- Land use changes and associated fragmentation, degradation and loss of wildlife habitats and ecosystem functions.
- Effects of climate change resulting in extreme weather conditions such as flooding and drought in wildlife habitats.
- Spread of invasive species.

Recommendations

- Securing wildlife corridors and dispersal areas should be enhanced as it is critical for the future survival of wildlife as a matter of urgency.
- Investment in tourism and wildlife to be enhanced as a basis for socio-economic development in the country.

5.3.12. Water Resources Management Programme

Location: Nationwide

Objective: To conserve and protect water resources.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, Water Sector Trust Fund (WSTF), and Water Resource Authority (WRA).

Project Progress: The programme seeks to ensure sustainable utilisation and improved quality of water through development/ implementation of sub-catchment management plans, rehabilitation/ upgrading of monitoring stations, ground water mapping and establishment of aluminium residues in drinking water. During the period under review, 17 Water Resources User Associations (WRUAs) in Lambwe Valley, Mara, Shimbrey, Mansiguda, Kanyanga Balich, Habarow, Kasha, Khurwein, Kalundu, Lower Saba, Saba Kamasian, Bendera, Olarabel, Oldonyiro, Waso Mara and Onkaru were supported by Water Resources Authority in sub catchment management plans implementation.

12 springs protection at (Ol Arabel, Bendera and Kamasian WRUAs). In addition, seven WRUAs namely, Upper Nyangores, Isei, Olooliamutia, Olmerroi, Lagha – Bulale, Lower Turkwel and Middle Turkwel were developed, reviewed, and adopted sub catchment management plans.

Planting of 45,000 fruit seedlings for catchment conservation and food security; WRA undertook Riparian marking and pegging at Lower Saba and Middle Saba for protection of rivers buffer zone; construction of two water pans at Morumbus and Kapsimatia; and two sand dams at Kalundu.

In addition, 29 regular gauging stations were rehabilitated, while another 29 stations were maintained to ensure water resources data is transmitted real time. Four ground water stations were automated. Four boreholes were drilled in Kambi Graba, Changamwe, Muserechi and Wajir Boror groundwater monitoring for the hydrogeological mapping.

The Water Sector Trust Fund during the period financed 13 Water Resources Users Associations and 19 Community Forest Associations (CFA) namely, Ngaya CFA, MEFECAP CFA, Nyambene CFA, Mt. Kenya East Environmental Conservation, Murinduko CFA, Kangaita CFA, Castle CFA , Mt. Kenya West Naromoru CFA, Hombe CFA, Kabage CFA, Kabaru CFA, Maranga CFA, Kiangómbe CFA, Gatare CFA, Wanjerere CFA, Kamulu CFA, Karua Hills CFA, Kiambicho CFA, Chuka CFA, Upper Rupingazi WRUA, Rwamuthambi WRUA, Endao WRUA, Narosura WRUA, Olkeju Osira WRUA, Kishenyi WRUA, Kalundu WRUA, Ilimkush WRUA, Upper Mwatate WRUA, Kauwi WRUA, Kamasian WRUA, Bendera WRUA and Ol Arabel WRUA to implement the sub catchment management plan activities.

The Regional Centre on Groundwater Resources, Education and Research collected and analysed 50 water samples to establish the aluminium residues in drinking water and two assessment reports on evaluation of surface and groundwater interaction using isotope technology produced.

Well-Constructed Telemetric station housing along Mereroni Riverbank

Telemetric Station constructed along Perkerra River

SCMP Implementation through construction of a Rainwater harvesting tank well installed at St Gerard Injira Primary School through Isiukhu WRUA.

Locals drawing clean water from a well-protected Spring in Vitambu in Kakamega by Bukhugu WRUA

Implementation Challenges

- The planned projects and programmes have been greatly impacted by COVID–19 pandemics, through disruption of various activities and reallocation of funds.

- Slow project implementation was caused by delayed GoK disbursement to WRA.
- Vandalism of the water monitoring stations.
- Unpredictable weather conditions (flooding of rivers resulting to water monitoring stations being washed away).
- Low public awareness on importance of the water resources monitoring stations.
- Limited support from development partners on implementation of sub catchment management plans.
- The delay in obtaining NO Objection from Development Partners has slowed the onset of implementation of projects.

Lessons Learnt

- To rehabilitate the monitoring stations during the dry season and low flows in the rivers for sustainability.
- Undertaking enforcement exercises in collaboration with the local administration and the newly formed Water Police Unit to assist the water resources regulatory functions.
- Adoption of advanced techniques is essential to map and access large ground water resources.

Recommendations

- Fast-track No Objection approvals from Development Partners.
- Timely disbursement of GoK funds.
- Intensify public awareness on the importance of water resource monitoring stations.
- Collaborate with county governments and National Government through chiefs for enhanced security to monitoring stations.
- Automate water resources monitoring devices and equipment to telemetric devices to minimise effects of destruction from floods.

5.3.13. Provision of Water to Poor Unserved areas including Informal Settlements

Location: Nationwide

Objective: To increase access to safe water and sanitation in unserved areas.

Implementing Agency: Ministry of Water and Sanitation, and WSTF.

Project Progress: The programmes entailed implementation of rural and urban water and sanitation projects in low-income areas and implementation of social/flat rate water tariff on an area basis. During the period under review, WSTF financed eight Up-scaling Basic Sanitation for the Urban Poor projects to implement sanitation activities benefiting 12,386 households translating to 61,930 additional people with sanitation services in urban areas. Additionally, five water projects and nine sanitation projects were financed benefiting 15,009 households translating to 75,046 people with water services and 5,794 households translating to 28,968 people with sanitation services. In addition, the 34 WRUAs were financed.

Implementation Challenges

- The Ministry's planned projects and programmes have been greatly impacted upon by the COVID-19 pandemic through disruption of various activities, reallocation of funds and slow project implementation.
- Inadequate funding due to budget cuts and delayed exchequer releases.
- Delay in releasing co-funding by county governments.
- The delay in obtaining NO Objection from Development Partners has slowed

the onset of implementation of projects.

- Inadequate capacity of implementing agents to implement projects.

Lessons Learnt

- Development of quality designs to avoid delays in key project start up activities.
- To avoid delays in key projects, start up activities, project design consultants are engaged from the onset to support proposal development and quality designs.

Recommendations

- Continually engage with the Ministry of Water, Sanitation and Irrigation and the National Treasury for timely release of funds.
- Fast-track No Objection approvals from Development Partners.
- Engage consultants to provide technical support to projects during preparation and implementation.
- Continually follow up on release co-funding by county governments.
- Rehabilitation of the old water infrastructure and review of governance framework to be prioritised.

5.3.14. Sewerage Programme

Location: Nationwide

Objective: To increase access to safe water and sanitation in major urban areas.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, Water Sector Trust Fund, and Water Works Development Agencies.

Project Progress: The programme entails improving access to sewerage facilities in urban areas. During the period under review, the following projects were completed: Narok Town Sewerage, Chepareria Sewerage, Othaya Sewerage, Isiolo Water Supply and Sewerage Project-Last Mile Connectivity, Malaba Sewerage Project, and Chepareria Sewerage Project.

Implementation Challenges

- Slow project implementation due to inadequate funds, delayed disbursements, and inadequate counterpart funding.
- The low sewerage coverage poses a major threat to water quality and public health, largely due to inadequate effluent major treatment because of pollution of water resources.
- Weak coordination mechanisms among state and non-state actors on planning and water development leading to inefficient spending on development of water resources.
- High energy cost of water production impedes affordability of water and sewerage services.
- The rate of increase in investments in water and sanitation does not commensurate with the increase in population and rapid urbanisation.
- Despite completion of water and sewerage projects, there are low household connections.

Lessons Learnt

- Water and sewerage projects completed and transferred in the last five years have had a minimal impact due to low household connections. Thus, it is essential to incorporate last-mile connectivity during the planning stage.
- There is a need for an investment plan to fund the gaps in the development and management of water and sanitation including the use of an alternative model of financing projects (PPP model).

- Strengthen collaboration and cooperation with other government institutions which facilitate project implementation; NLC, KeNHA, NEMA, Kenya Forest Service etc.

Recommendations

- Secure/acquire project sites/wayleaves for large infrastructure before projects commencement to reduce delays and escalated compensation claims.
- Fast-track on-going projects especially on sewerage to address water pollution challenges.
- Prioritise climate-smart water and sanitation projects to address climate change related challenges.
- Rehabilitate the old water infrastructure and review governance framework.

5.3.15. Transboundary Waters

Location: Busia County, Turkana County.

Objective: Enhance cooperation in sustainable management and development of shared water resources.

Implementing Agency: Ministry of Water, Sanitation and Irrigation.

Project Progress: The programme entails the development of a legal framework for the implementation of transboundary water policy, enhancing cooperation in sustainable management and development of shared resources. During the review period, five sub-catchment management plans were reviewed and developed for Kocholia Multipurpose Project as well as capacity building for Water Resource User Association members on catchment for protection; detailed designs for Angololo prepared and submitted and project on sustainable development of Lake Turkana and its river basin was at preliminary stages-contractor mobilising.

Implementation Challenges

- Trans-country water resources conflicts.
- The development of shared water resources takes a longer period due to prolonged negotiation processes between riparian states.
- Inadequate counterpart funding for joint bilateral projects.

Lesson Learnt

- Collaborative framework between the national and county governments is essential for sustainable water resources and sanitation.

Recommendations

- Operationalisation of water sector intergovernmental cooperation framework to govern management of inter-county water resources use to minimise conflicts as well exploring new investment opportunities in water and sanitation.
- Secure bilateral treaties rather than MoUs with bilateral countries.
- The Ministry should enhance a regulatory framework that governs management of inter-county water resources used to minimise conflicts as well as explore new investment opportunities in water and sanitation.

5.3.16. Water Harvesting and Storage Programme

Location: Nationwide

Objective: To increase water storage and availability capacity.

Implementing Agency: Ministry of Water, Sanitation and Irrigation.

Project Progress: The programme targeted to enhance reliable and adequate water harvesting and storage capacity to meet domestic, irrigation, industrial and environmental needs through construction of dams and water harvesting structures. During the period under review, the sector implemented large and medium size dams which are at various stages namely Yamo Dam (100 percent) in Samburu; Karimenu Dam (90 percent) in Kiambu; Thwake Dam (70 percent) in Makueni/Kitui; Muruny-Siyoi Dam (65 percent) in West Pokot; Mwache Dam (6 percent) in Kwale/ Mombasa; Bunyunyu Dam in Kisii (10 percent); Ruiru II Dam (7.5 percent); and Soin-Koru Multipurpose Dam (5 percent).

Thwake dam (70 percent) in Makueni/Kitui under construction

Implementation Challenges

- High cost of RAP, land acquisition/ compensation, wayleaves, forest moratorium issues for large infrastructure projects.
- Slow project implementation due to inadequate funds, delayed disbursements, and inadequate counterpart funding and COVID-19 disruptions has negatively impacted the implementation of some projects.

Lesson Learnt

- Capacity building is critical for increased public participation in planning, monitoring, and evaluation of programmes. Incorporating capacity building in all projects and programmes targeting all stakeholders from decision makers to subsidiary implementers results in sustainability and resilience.
- There is a need for an investment plan to fund the gaps in the development and management of water and sanitation including the use of an alternative model of financing projects (PPP model).

Recommendations

- Engage the National Treasury on implementation of RAP and master list/tax exemptions to reduce delay in project implementation.

- Acquire and secure project sites/ wayleaves for large infrastructure early to reduce compensation claims which arise during project commencement. This requires collaboration with the National Treasury, NLC and PAPs.
- Sector investment planning to meet increased demand for water and sanitation services arising from rapid growth of peri-urban and satellite towns.

5.3.17. Urban Water Supply

Location: Nationwide

Objective: To increase access to safely managed water and sanitation supply in urban areas.

Implementing Agencies: State Department for Water and Sanitation, Water Works Development Agencies, and WSTF.

Project Progress: The programme aimed to achieve universal access to and increase safe water supply and sanitation in major urban areas. During the review period, the sub-sector completed Lake Victoria Water Supply and Sanitation Programme Phase II, Migori Water and Sanitation Project, Siaya/Bondo Water Supply and Sanitation, Mavoko Drinking Water Supply Project, Vihiga Cluster Water Project, Nairobi Water Distribution Network, Naivasha Industrial Park Water Supply Project, Dongo-Kundu Water Supply Phase I, Thika & Githunguri Water, Murang'a Urban Water Supply Project-Last Mile Connectivity, Isiolo Water Supply and Sewerage Project-Last Mile Connectivity, and Sanitation projects and drilled 193 boreholes in informal settlements in Nairobi.

Completed Mavoko Drinking water supply Project in Machakos county.

Implementation Challenges

- The Ministry's planned projects and programmes have been greatly impacted by COVID-19 pandemic, through disruption of various activities, reallocation of funds.
- Slow project implementation due to inadequate funding caused by budget cuts and delayed exchequer releases.
- High cost of RAP, land acquisition, wayleaves, forest moratorium issues for large infrastructure projects.
- Inadequate frameworks, management systems, and enforcement of laws, policies, strategies and regulatory guidelines.
- Non-recovery of loans for infrastructure developed using donor funds.
- Despite completion of water and sewerage projects, there are low household connections.
- High energy cost for treating and pumping water impedes affordability.
- High non-revenue water level and water use inefficiency.
- Vandalism of the water infrastructure.

Lessons Learnt

- A collaborative framework between the national and county governments is essential for sustainable water resources and sanitation services.

- Adoption of advanced techniques is essential to map and access large groundwater resources and adopt energy-efficient technologies to reduce the cost of water.
- Water and sewerage projects completed and transferred in the last five years have had a minimal impact due to low household connections. It is, therefore, essential to incorporate last-mile connectivity during the planning stage.
- There is a need for an investment plan to fund the gaps in the development and management of water and sanitation including the use of an alternative model of financing projects (PPP model).
- Capacity building is critical for increased public participation in planning, monitoring, and evaluation of programmes. Incorporating capacity building in all projects and programmes targeting all stakeholders from decision makers to subsidiary implementers results in sustainability and resilience.

Recommendations

- The Ministry should fast-track the operationalisation of the framework for full involvement of the counties in the planning and implementation of national projects to enhance inclusivity, cooperation, and effective participation in project implementation with the focus of last mile connectivity to increase access to water and sanitation.
- Enhance budgetary allocation and continue rationalising the activities to match the expected exchequer releases.
- Acquire and secure project sites/ wayleaves for large infrastructure before projects commencement to reduce delays and escalated compensation claims.
- Fast-track on-going projects, especially on sewerage to address water pollution challenges.
- Incorporate the last mile connectivity cost during the project's planning stage.
- Prioritise climate-smart water and sanitation projects to address climate change related challenges.
- Rehabilitate the old water infrastructure and review the governance framework.
- Adopt water efficient technologies (smart meters) to reduce water losses.

5.3.18. Rural Water Supply

Location: Nationwide

Objective: To increase access to safely managed water and sanitation supply.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, WSTF, and Water Works Development Agencies.

Project Progress: The programme entailed rehabilitation/expansion of existing large rural water supply schemes, and drilling of boreholes, water for schools and health facilities. During the period under review, the following projects were completed Ithanga Water Supply Project Phase 2; Korbesa & Malka Galla Water Supply Project; Soy-Kosachei Water Project; Murang'a South Water Supply Project-Last Mile Connectivity; Mathira Water Supply Project; Malaba Water and Sanitation, Homabay Water Supply Improvement and Tula-Tula Elnur-Horote Water Project. In addition, the sector connected 32 schools and 21 health facilities to reliable water; and constructed 60 small dams/pans in ASAL areas.

Implementation Challenges

- Drought has led to drying up of many water sources and intakes.

- The sub-sector planned projects and programmes have been greatly impacted by the COVID-19 pandemic, through disruption of various activities, and reallocation of funds.
- Slow project implementation due to inadequate funding caused by budget cuts and delayed exchequer releases.
- Climate change and associated extreme weather threaten sustainable development of water resources i.e., flooding and drought.
- Environmental degradation and illegal encroachment of water catchment areas.
- Vandalism of the water infrastructure.

Lessons Learnt

- Capacity building is critical for increased public participation in planning, monitoring, and evaluation of programmes. Incorporating capacity building in all projects and programmes targeting all stakeholders from decision makers to subsidiary implementers results in sustainability and resilience.
- Collaborative framework between the national and county governments is essential for sustainable water resources and sanitation services.
- Adoption of advanced techniques is essential to map and access large ground water resources.

Recommendations

- Enhance budgetary allocation and continue rationalising the activities to match the expected exchequer releases.
- Continually engage with the Ministry of Water, Sanitation and Irrigation and the National Treasury for timely release of funds.
- Prioritise climate-smart water and sanitation projects to address climate change related challenges.
- Adopt water efficient technologies-green energy.

5.3.19. Water Research Programme

Location: Nationwide

Objective: Technical capacity built in the subsector.

Implementing Agencies: Ministry of Water, Sanitation and Irrigation, WSTF, and Kenya Water Institute (KEWI).

Project Progress: The programme entailed enhancement and facilitation of research in water resources utilisation and management, operationalisation of Water Resource Centre at KEWI and establishment of research funding mechanism. During the period under review, the sub-sector finalised the development of Water Sector Research and Innovation Financing Framework and Policy to guide in financing of research and innovation initiatives. In addition, construction of the Centre was completed, and geo-equipping of the Centre was at 98 percent completion rate.

Implementation Challenges

- Low enrolment of students at KEWI during COVID-19 pandemic.
- Obsolete infrastructure within KEWI Campus.

Lesson Learnt

- E-learning and online learning programmes lead to increased student enrolment.

Recommendation

- Budget allocation for rehabilitation and upgrading of KEWI infrastructure to be enhanced.

5.3.20. Integrated Regional Development

Location: Nationwide

Objective: To improve and sustain livelihoods.

Implementing Agencies: Ministry of EAC and Regional Development; and Regional Development Authorities (TARDA, KVDA, ENSDA, Coast Development Authority, Lake Basin Development Authority and Ewaso Nyiro North Development Authority).

a) *Tana Delta Rice Irrigation Project*

Location: Garsen, Tana River/Lamu Counties

Objective: Aimed at enhancing quality of life for the communities in the Tana Delta through sustainable utilisation of land, food production, creation of employment, environmental protection, and revenue generation.

Implementing Agency: TARDA

TDIP FARM STATUS (FY 2021/2022)

Kitere Main intake | Kitere Main Canal to rubber dam | Community watering livestock along the canal

Rubber Dam and weir | Ongoing bush clearing for ploughing | Farm ready for planting

Community Bridge constructed by TARDA for crossing over the canal | Existing Rice mill complex for rehabilitation or replacement (7.5 ton/hr capacity)

Project Progress: In the year under review, the Authority undertook; bush clearing and reinforcement of channel embankments (7km); de-siltation and repair of the Kitere Water Delivery Channel and cut away desilted materials (5.5km); restoration and slope protection works at Kitere Bell Mouth (800m3), and repair of the Western dyke damaged previously done and completed for flood control. The project was at a 35 percent completion rate.

Implementation Challenges

- Low and delayed disbursement of budgeted funds.
- Floods and drought have led to resource constraints. Floods have destroyed key infrastructure including the flood protection dykes, main water supply canal and its network, farm roads and production fields.
- Unstable river course making the river change its course away from the project intake works.
- Resources use conflicts particularly competition for land between farmers and pastoralists.
- Lengthy negotiations and resource mobilisation process for funding of the project through PPP.

Lessons Learnt

- Public participation in planning, monitoring and evaluation of programmes is to be incorporated at all levels of the Project Cycle Management.
- There is a need to concurrently develop climate adaptable or climate resilient programmes for sustainability of the project.

Recommendations

- Prioritisation of programmes for financing by the Exchequer
- Rehabilitation and expansion of the project
- Regular follow-up and support by the Vision 2030 Delivery Unit to positively influence projects that have been stalled for a long time.

Location: Garsen, Tana River and Lamu Counties.

Objective: To provide food security, balance the gaping sugar deficit and imbalance in the country, save on foreign exchange, create employment and wealth, reduce wealth imbalance between urban and rural areas and provide technology transfer in the sugar growing sector.

Implementing Agency: TARDA

Project Progress: The project was not funded in the year under review hence no progress was made on the implementation status.

Implementation Challenges

- The feasibility study was carried out in 2007, and substantial changes have occurred both in investments as well as for the operating costs of the project thus the need to review the studies.
- Inability to fund the project despite having done a feasibility that indicated good returns on investment.
- Lengthy negotiations and resource mobilisation process for projects to be funded through PPP.

Lessons Learnt

- Public participation in planning, monitoring and evaluation of programmes is to be incorporated at all levels of the project cycle management.
- There is a need to build institutional capacity on resource mobilisation to ensure project implementation.

Recommendations

- The need for regular follow-up and support by the Vision 2030 Delivery Unit on projects that have stalled for a long time.
- Resources mobilisation for external funds in addition to Exchequer financing.

b) *High Grand Falls Multipurpose Reservoir*

Location: The project site is located on the Tana River 50km downstream of the Kiambere Hydro Power Station. The project straddles Kitui, Embu and Tharaka-Nithi counties.

Objective: To provide a large-scale multipurpose reservoir on the Tana River for water supply, irrigation, river regulation & flood control and power generation. Other aspects to be considered include inter and intra-basin water transfers, fisheries and downstream ecosystem conservation and sustainability.

Implementing Agency: TARDA

Project Progress: The project did not receive any funding from the Exchequer; hence no progress was made on the implementation status.

Implementation Challenges

- Lengthy negotiations and resource mobilisation process for funding of the project through PPP.
- Lack of funds to review feasibility study and prepare detailed designs.
- Effects of climate change which have led to erratic weather patterns leaving the communities within the TARDA region vulnerable against limited resources in the Authority to further invest in community programmes.
- High cost of technology acquisition and adoption.

Lessons Learnt

- Public participation in planning, monitoring and evaluation of programmes is to be incorporated at all levels of the project cycle management.
- Prioritisation of projects for funding, phasing of implementation is important to ensure delivery.

Recommendations

- Synergies between MDAs to deliver on the different components of the project in partnership with the implementing agency.
- Prioritisation of projects/programmes (financing).
- The Government should provide support for preliminary feasibility studies and other components of the project such as resettlement of the PAP's.
- Carry out further extensive sensitisation ahead of commencement of the project construction work.

c) *Munyu Multipurpose Reservoir and the Greater Kibwezi Irrigation Project*

Location: The project site is located on the Athi River within three counties: Kiambu, Machakos and Makueni.

Objective: To enhance water storage for irrigation, improve food security, hydropower generation and public water supply.

Implementing Agency: TARDA

Project Progress: The project stalled due to lack of funding; hence no progress was made on the implementation status.

Implementation Challenges and Emerging Issues

- Lack of funds to review feasibility study and prepare detailed designs. The feasibility study was carried out in 1986 thus the need to reappraise the financial model and technical parameters of the project.
- At the time of the study, the project was to be in a sparsely populated area by then with very little economic activity taking place. An evaluation of the number of households living in the area needs to be done.
- Owing to the considerable size of the required investment, it will be necessary to phase out the development of the project.
- The project is a social intervention with low return margins but very high social economic benefits. Due to this, the project does not appeal to the private sector.
- Lengthy negotiations and resource mobilisation process for funding through PPP.

Lessons Learnt

- Delayed implementation of the project leads to a high cost of developing the project.
- Public participation in planning, monitoring and evaluation of programmes is to be incorporated at all levels of the project cycle management.
- There is a need to concurrently develop climate adaptable or climate resilient programmes for sustainability.

Recommendations

- Ensure there is proper project cycle management.
- Prioritise projects and programmes during financing & implementation.
- The Government provides support for preliminary feasibility studies.

5.4. POPULATION, URBANISATION AND HOUSING SECTOR

The sector seeks to ensure a quality population with *"adequate and decent housing in a sustainable environment"* through implementation of the Population Policy for National Development and provision of adequate and decent housing for sustainable development. The targets for this Sector are progressively achieved by reducing the rapid population growth and Total Fertility Rate; increasing life expectancy; increasing access to affordable and adequate housing; installing key housing infrastructure; undertaking county capacity building in urban planning and development campaign as well as incentivising private sector to invest in the Sector.

5.4.1. Kenya Population and Housing Census 2019

Location: Nationwide

Objective: To provide data on various population indicators thereby supporting evidence-based planning and implementation of the population programme.

Implementing Agency: KNBS

Project Progress: Twelve analytical reports based on 2019 Kenya Population and Household Census namely: Fertility and Nuptiality; Mortality; Migration; Household and Family Dynamics; Disability; Education; Housing conditions; Amenities and Household Assets: Urbanisation; ICT; Youth and Adolescents; Older and Vulnerable

Population; and Gender Dimensions were produced and disseminated through a launch held on 5th May 2022.

Implementation Challenges

- The COVID-19 pandemic significantly interrupted the report writing process and resulted in a delay of two years. The sudden onset of the pandemic was an unforeseen challenge that had a significant impact on the project timeline and required adjustments to be made.
- Report writing required a significant amount of time, money, and personnel to implement. These resource constraints present challenges in terms of project management and implementation.
- Engaging with multiple stakeholders throughout the project is essential for ensuring that the report accurately reflects the needs and priorities of the community. However, convening all stakeholders together throughout the entire report writing process was a challenge, especially in situations where stakeholders had competing priorities or limited availability.
- Limited capacity in certain areas within KNBS can present challenges in terms of report writing. (Ambiguity – not sure if the "areas" are geographical locations or areas within the institution).

Lessons Learnt

- Engagement of stakeholders is key to the success of the report writing process. Regular communication and engagement with stakeholders throughout the project helped to ensure that the report accurately reflected the needs and priorities of the community.
- The COVID-19 pandemic highlighted the importance of adaptability in project management. Unexpected events can disrupt even the most carefully planned projects, and it is essential to be able to pivot quickly and find new ways of achieving project goals.
- It is important to document lessons learned from the project to inform future projects.
- Building capacity among KNBS staff prior to the census can help to ensure that they are prepared to carry out the necessary data analysis and report writing tasks
- Early mobilisation of resources can help to ensure that the necessary time, money, and personnel are available to implement the project successfully.
- Implementing a risk matrix can help to identify potential challenges and risks before they occur and develop mitigation strategies to address them. This can help to ensure that the project stays on track and within budget, even in the face of unforeseen challenges such as the COVID–19 pandemic.

5.4.2. Affordable Housing

Location: Nationwide

Objective: To facilitate production of affordable housing units and to improve the lives of people living in informal settlements.

Implementing Agencies: State Department for Housing and Urban Development, and NHC.

Project Progress: 605 affordable housing units at 40 percent level of completion, 470 housing units for disciplined forces/services at an average of 75 percent level of completion, and 990 social houses at Mukuru Meteorological site at 40 percent level of completion. The target assumed that the housing levy which was challenged in court would be affected to finance construction. 413 civil servants' units completed (220 in Embu and 193 in Kiambu). 462 social housing units completed in Mavoko. 192 housing units for disciplined forces/services completed (60 units Kiambu APS, 72 units Loresho Training College, 60 units NPS – Rapid Deployment Unit HQs). Slum Upgrading and Prevention Bill is awaiting enactment**.** The Housing Bill 2022 is under review. The following police and prison housing projects stalled at various levels of completion due to inadequate funds: Garsen Police Station, Tana River County at 92 percent; Shimo La Tewa Prison, Mombasa County at 90 percent; Ruiru GK Prison, Kiambu County at 90 percent; Emali AP Camp, Makueni County at 90 percent; AP Training College (Embakasi), Nairobi County at 90 percent; Garissa Police Station at 40 percent; and the additional housing project for the General Service Unit, Nairobi County at 35 percent.

Changamwe Infill Phase III (84 units) at Mombasa County was at 92 percent completion level, Nyeri Mixed Use Development (80 units) at Nyeri County was at 96 percent completion level, Voi Infill (80 units) at Taita Taveta County at 66 percent completion level, and Stoni Athi Sector IIA (160 units) at Machakos County which was at 50 percent completion level. These projects total 484 housing units which, once completed, will provide shelter to Kenyans. Voi Infill, Changamwe Infill Phase III and Nyeri Mixed Use Development were behind schedule. This was occasioned by the COVID-19 pandemic that resulted in disruption in global supply chain affecting EPS beads importation.

Implementation Challenges

- Court cases caused delays in commencement of projects. When the Housing Fund contributions were challenged in court, the resources available for delivery of the Affordable Housing Programme were limited to what the National Treasury allocates yearly. Without the mandatory contributions therefore, along with the fiscal constraints affecting the country, the delivery of the programme has been severely impacted.
- Limited accessibility and rising cost of housing finance and building materials.
- Little private sector participation in the provision of units that can easily be afforded by low-income earners who are the majority.
- COVID-19 pandemic affected completion of projects due to the limited number of people that could be on site at the same time.
- Disruptions in the global supply chain affected importation of beads that are important in manufacturing of EPS Panels.
- Low absorption of the mortgage offered by the Kenya Mortgage Refinance Company (KMRC) due to low-income levels of the people and the fact that KMRC only finances the purchase of built housing units.
- The construction process from project concept to completion involves many actors and is lengthy.
- The PPP mode of procurement is new in the housing sector and its implementation as provided under the law is challenging to many actors. Some of the would-be partners are yet to familiarise themselves on areas of partnership, the synergies to bring on board in terms of finances, experience, and expertise and how to package themselves as a team of partners to address the Government's (procuring entity's need).

Lessons Learnt

- Encouraging voluntary contributions to the Housing Fund would mobilise resources to supplement National Treasury allocations.
- Private investors are key to delivery of the affordable housing agenda.
- Effective coordination among key government players (Drivers and Enablers) is crucial.

- Locally sourcing raw materials for the EPS panels reduces the supply chain lead time.
- Levying liquidated damages on contractors who delay completion projects improves project delivery.
- Addressing housing shortage for the low-income segment requires Government intervention as market forces result in oversupply of housing for the high-end segment.
- Coordination of the housing sector requires a robust policy, legal, and regulatory framework, which is key for the sector's vibrancy. For instance, once the Housing Bill 2022 is made into an Act of Parliament, it will give effect to Article 43(1)(b) of the Constitution to enhance effective coordination, facilitation, and monitoring of the housing and human settlements sector and for connected purposes.

Recommendations

- Support the National Housing Development Fund through budgetary provisions.
- Strengthen the KMRC to enhance affordability of mortgages by refinancing existing and future loan portfolios to the affordable housing segment.
- Active participation of the devolved governments in actualising housing delivery.
- Levy liquidated damages to contractors on failure to complete projects as scheduled.
- Fast-track the enactment of the Housing Bill, 2022 to give effect to Article 43(1)(b) of the Constitution and enhance effective coordination, facilitation, and monitoring of the housing and human settlements sector.

Embu Civil Servants Housing Project, Embu County

5.4.3. Research and Development on Appropriate Building Materials and Technologies (ABMT)

Location: Siaya, Uasin Gishu, Nakuru, Bomet, Kajiado, Mandera West Pokot, Nyeri and Machakos Counties.

Objective: To promote use of sustainable low-cost housing building materials and technologies.

Implementing Agencies: State Department for Housing and Urban Development, and NHC.

Project Progress: NHC established a factory in 2013 that manufactures appropriate building material/technology (EPS); which is cheaper on mass production of houses and enables faster completion of houses. In 2021/22, the Corporation produced 50,895M^2 of panels.

Cumulatively, 2989 artisans and masons were trained on ABMT - 2,100 by the State Department for Housing and Urban Development and 889 by NHC on the making and utilisation of interlocking soil blocks and use of EPS panels respectively in support of rural housing.

Implementation Challenges

- COVID-19 pandemic affected completion of projects – supply chain issues with the importation of beads to produce EPS panels which were being used in the projects.
- COVID-19 affected the number of artisans trained on the use of ABMTS.

Lesson Learnt

- Locally sourcing raw materials for the EPS panels reduces the supply chain lead time.

Recommendation

- Create awareness of cost effectiveness and efficiency of use of ABMTs.

5.4.4. Physical and Social Infrastructure in Slums and Informal Settlements in Selected Urban Areas

Location: Kakamega, Kiambu, Nairobi, Kwale, Taita Taveta, Bungoma, Kisumu, Meru, Isiolo, Kirinyaga, Kitui, Tharaka Nithi and Nakuru.

Objective: To improve the quality of the life for people living and working in informal settlements.

Implementing Agency: State Department for Housing and Urban Development.

Project Progress:

Construction of Sewer Lines - 4km of sewer line in Nyagachok completed.

Construction of Bitumen Roads - 3.5km road in Londiani, Kericho County completed; 3.9km in Gitogothi-Makaburini and Mariko in Limuru Kiambu County completed; 3.7km KCB Slaughter House Road in Mavoko Slum, Mwingi Town in Kitui County completed; Dagoretti Access Road at 90 percent completion; 28 high mast flood lights installed in various counties; five in Nyamira, seven in Migori, six in Bomet, six in Kiambu, two in Tana River, two in Tharaka Nithi ongoing at 95 percent completion rate.

5.4.5. Nairobi Metropolitan Services Improvement Project

Location: Nairobi County

Objectives: To strengthen urban services and infrastructure in 13 urban centres of the Nairobi Metropolitan Region.

Implementing Agencies: State Department for Housing and Urban Development, and Nairobi City County Government.

Project Progress: Completion of Mitubiri Sanitary Landfill which is 85 percent complete. The contractor is awaiting imported materials to complete the work.

Implementation Challenge

- Delays in shipping of raw materials due to the COVID-19 pandemic

Recommendation

- Research on appropriate substitute materials that can be sourced locally.

5.4.6. Kenya Informal Settlement Improvement Project Phase II

Location: Nationwide

Objectives: To improve the quality of the life for people living and working in informal settlements.

Implementing Agency: State Department for Housing and Urban Development.

Project Progress: Participation agreements were signed with 33 participating counties. Inducted County Teams (Governors, County Executive Committee Members, County Finance Officers and County Procurement Officers). 1289 title deeds issued to regularise land tenure in informal settlements under KISIP.

Implementation Challenge

- Delays by counties in setting up project implementation teams.

Lessons Learnt

- Need for continuous engagement with the counties and other key stakeholders involved
- Involving stakeholders in project implementation ensures project acceptability and results in desired impact.
- There is latent potential in slums and informal settlements in the form of a demographic dividend. The youth who form the majority group/population can be integrated into a partnership with the government in slum upgrading.
- Collaboration between national and county governments is very necessary for ease of project activities and implementation e.g., for example, in the acquisition of land ownership documents, and processing of the same where necessary.

Recommendations

- Setting up joint implementation teams.
- Continuous capacity building at both national and county levels.
- Integrate the youth into a partnership with the Government in slum upgrading.
- Ensure the involvement of stakeholders from the onset of projects through regular consultations and public participation.
- Collaboration between national and county governments in the implementation of projects.

5.4.7. Urban Social Infrastructure

Location: Kiambu, Kisii, Murang'a, Nakuru, Kitui, Siaya, Embu, and Bungoma

Objectives: To create employment and enhance income.

Implementing Agency: State Department for Housing and Urban Development.

Project Progress: The following three markets were completed; Muthithi, Kioto and Ikutha. Salgaa at 50 percent, Sega at 40 percent, Ogembo at 35 percent, Sirisia at

35 percent, Kangari at 35 percent, Githurai market at 95 percent, and Nyansiongo at 75 percent markets were ongoing.

Implementation Challenges

- Acceptability of the project by all key stakeholders.
- Lack of market management policies and guidelines that guide on market development by national government and revenue sharing formula. This has made it difficult to sustainably maintain existing markets as well as financing the development of the new ones.

Lessons Learnt

- Stakeholder involvement is critical for project implementation.
- Market management policy and guidelines are key in the development and management of markets.

Recommendations

- Continuously engage and sensitise the stakeholders at all levels for successful project delivery.
- National and county governments to jointly develop market management policy and guidelines.

Ongoing Nyansiongo Market, Nyamira County

5.4.8. Kenya Urban Support Programme

Location: Nationwide

Objectives: To establish and strengthen urban institutions to improve infrastructure and services.

Implementing Agency: State Department for Housing and Urban Development.

Project Progress: 45 counties (excluding Nairobi City & Mombasa) are implementing various urban infrastructure projects in 59 municipalities.

Implementation Challenge

- Inadequate technical capacity at municipal level.

Lesson Learnt

- Technical capacity is critical to project implementation.

Recommendations

- Build requisite capacity in municipalities.

5.4.9. Urban Stormwater Infrastructure

Location: Nationwide

Objectives: To improve level of sewerage and infrastructure.

Implementing Agency: State Department for Housing and Urban Development.

Project Progress: The 1.5km Kerugoya Kutus storm water drainage was completed in the FY 2021/22.

Implementation Challenges

- Lack of cooperation between the national government and county Government.
- Delays in release of Fund from National Treasury

Lesson Learnt

- It is critical for the national government and county government to work in collaboration to provide necessary social infrastructure.

Recommendations

- Encourage cooperation between the national and county governments.
- Ensure timely release of funds by the National Treasury.

5.4.10. National Population Centre

Location: Nairobi

Objectives: To enhance capacity to collate and analyse population data.

Implementing Agency: National Council for Population and Development.

Project Progress: A proposal was submitted to Partners in Population and Development (South-South Cooperation) on funding for setting up the National Population Centre and they provided positive feedback. The Council is following up on acquisition of land to establish the Centre.

Implementation Challenge

- The project has not commenced due to lack of land to set up the Centre. However, the Council is following up with the Ministry of Lands and Physical Planning for allocation of land within Nairobi for the project.

Recommendations

- Fast-track consultations with the Ministry of Lands and Physical Planning for allocation of land within Nairobi to set up the Population Centre.
- Advocate for funding from development partners and Government to set up and operationalise the Centre.

5.5. GENDER, YOUTH AND VULNERABLE GROUPS SECTOR

The Sector seeks to ensure *"Equity in Access, Control and participation in Resource Distribution for Improved Livelihoods of Women, Youth and Vulnerable Groups."* for all citizens by *the year 2030.* The Constitution lays emphasis on gender equality and uplifting the lives of all vulnerable groups. Kenya's population is predominantly youthful hence special programmes dedicated to youth have become increasingly urgent. Projects outlined in the third MTP underscore promotion of gender equality and empowerment of women, youth, children, and the vulnerable members of society. This is essential in realisation of human rights and SDGs.

The Sector covers the following projects: Affirmative Action Funds, Prevention and Response to GBV and eradication of FGM Gender Mainstreaming, Sanitary Towels Programme, Youth Empowerment Centres (YEC), Kenya Association of Youth Centres, KYEOP, NYS Transformation Programme, Youth Cohesion, National Values and Social Development, Youth Employment and Enterprise Development, Biashara Bank, National Safety "Inua Jamii" Programme, Disability Mainstreaming and Child Community Support Services.

5.5.1. Affirmative Action Funds

Location: Nationwide

Objective: To promote economic empowerment.

Implementing Agencies: WEF, Uwezo Fund, YEDF, and NGAAF.

Project Progress: ***Women Enterprise Fund***: The Fund promoted financial inclusion and empowerment of women through disbursement of KSh. 3.01 billion Constituency Women Enterprise Scheme loans to 10,566 groups comprising 115,584 beneficiaries; KSh. 17.86 million Local Purchase Order (LPO) loans to reach 22 clients; KSh. 27.5 million loans to two Financial Institutions. Additionally, 131,250 benefited from entrepreneurship training; 594 products marketed on WEF SOKO; 4,895 women sensitised on online marketing, product certification and business club formation for networking. Cumulatively, KSh. 24.62 billion loans have been disbursed to 131,274 groups benefiting 2,003,047 women through all products; 1,643,530 women trained on entrepreneurship; and 21,176 women sensitised on product certification, formation of business clubs/exchange programmes, exhibitions skills and online marketing.

Uwezo Fund: The Fund issued loans amounting to KSh. 544,894,200 to 94,945 individuals from 5,585 groups. The Fund capacity built 5,585 beneficiary groups.

National Government Affirmative Action Fund: NGAAF disbursed KSh. 2 billion to 47 counties during the FY to support the vulnerable groups. KSh. 384.44 million was disbursed to support Affirmative Action Groups (AAGs) with bursaries and scholarships benefitting 44,183 students comprising of 23,835 female, 18,333 male and 2,015 persons with disability in secondary schools, tertiary institutions, and universities. Additionally, KSh.794.56 million went towards Women Economic Empowerment Programmes and value addition initiatives benefiting 3,560 groups comprising 279,271 AAGs broken down into 66,617 male, 206,987 female, and 5,667 persons with disabilities. Furthermore, KSh. 871.32 million were disbursed towards countywide projects, civic education and administration.

Youth Enterprise Development Fund: The Fund promoted entrepreneurship development through disbursing loans worth KSh. 403.6 million to 31,112 youth entrepreneurs, of which KSh. 370.98 million was under group lending and KSh. 32.5 million under the individual lending model. The financing supports enterprises in various sectors including LPO financing, Talanta, and Agri-business. Further, 99,822 youth were provided with business development services. This was achieved through the provision of entrepreneurship skills training to 93,688 youth, business mentorship and coaching provided to 3,490 youth, supported 1,304 youth with market access and linkages for their products, affordable trading spaces and business incubation/innovation services provided to 1,340 youth. Moreover, YEDF facilitated 1,633 youth to access and travel for jobs abroad through the Youth Employment Scheme Abroad Programme.

Implementation Challenges

- Manual operations of Uwezo Fund and NGAAF.
- Delays in the gazettement of Constituency Uwezo Fund Management Committees.
- Low repayment rates are due to the notion that the funds are grants.
- Delay in releasing funds by the National Treasury especially at the beginning of the financial year.
- Inadequate staffing at NGAAF.
- Limited resources to meet the growing demand for services. Allocations received from the exchequer have dwindled over time.
- Entrepreneurial skills/capacity gap amongst the youth: Majority of youth lack the necessary skills to undertake successful businesses which impedes the sustainability and growth of youth businesses.
- Impact of COVID-19 pandemic on youth enterprises leading to low loan repayments and loan restructuring.
- Weak legal and regulatory frameworks which limit support and growth of youth owned enterprises.

Lessons Learnt

- Automation of loan repayment process encouraged loan payments due to the convenience and reduced transaction cost.
- Integration of technology in implementation of Uwezo Fund eases loan management and reconciliation.
- The multi-agency approach in the implementation of the Uwezo Fund improves efficiency.
- Public sensitisation and awareness lead to an increase in demand for loans.
- Continuous sensitisation and follow up of the beneficiary groups reduce default.
- Training of target beneficiaries should be demand driven.
- It is imperative to leverage on engagement of strategic partnerships and collaborations with organisations in the youth and MSMEs spaces. There is also a need to embrace technology and re-engineering of products to match the market needs. This will enhance efficiency and effectiveness for greater impact.

Recommendations

- Increase GoK funding (development and recurrent exchequer) to facilitate more lending and staffing
- Enhance resource mobilisation beyond the National Treasury to avoid over-reliance of the Exchequer.
- The National Treasury to ensure that the funds are disbursed in time.
- Automate services include loan applications and recovery in line with the law and Government policy on digitalisation of services.
- Review the legal frameworks to strengthen the operations of the Funds.
- Continuous training and sensitisation of the beneficiaries and the public on the Funds' products.
- WEF to work more closely with other key stakeholders in ensuring loans are recovered.

- Fast-track the process of nominating members of the constituency committees.
- Involve various stakeholders, especially the National Government Administrative Officers, financial institutions and technical departments from various Ministries on the implementation of Uwezo Fund to enhance sustainability, networking and linkages.
- Facilitate installation of Integrated Financial and Programmes Information Management System.
- Re-engineer YEDF mandate to align to the Government priority areas to enhance efficiency.

5.5.2. Prevention and Response to Gender Based Violence and Eradication of Female Genital Mutilation

a) Prevention and Response to Gender Based Violence

Location: Nationwide

Objective: To eradicate GBV in Kenya.

Implementing Agency: State Department for Gender.

Project Progress: The Department conducted advocacy and awareness campaigns on GBV, teenage pregnancies and child marriages on local/vernacular radio, TV, and social media platforms. This was done through radio talk shows on SBS Radio Kilifi, Syokimau FM, Mutongoi TV and Thome FM in Kitui and Radio Akicha and Ejok FM in Turkana. In addition, community dialogues were held with women, girls, men, opinion leaders' morans and boys in the campaign against GBV, teenage pregnancies and child marriages in 10 counties. Sensitisation for the transport sector (Bodaboda) in 10 counties namely Kilifi, Nairobi, Homabay, Kitui, Narok, Machakos, Nakuru, Bungoma, Meru and Bomet Counties were conducted. The Department also coordinated a national launch and celebration of 16 days of Activism against GBV in 21 counties and disseminated the popular version of the Second Kenya National Action Plan (KNAP) in 12 counties. Moreover, the Department localised the Second KNAP in 14 counties through media engagement (electronic and print). Documentation of women's role in peace and security in Kenya was done and a booklet on the role of women in peace committees is available. Capacity building of duty bearers at sub-county level was undertaken in the following seven counties: Nairobi, Kitui, Kilifi, Narok, Homabay, Kwale and Turkana.

Implementation Challenges

- Inadequate gender statistics affect policy decisions.
- Budget cuts.
- Inadequate monitoring and evaluation system.
- Lack of safe spaces for girls facing the risk of FGM and other GBV cases.

Lessons Learnt

- Strengthening synergies and collaboration between state and non-state actors enhances prevention and response on GBV.
- Continuous awareness creation is key in changing social and gender norms.
- Availability of up-to-date data at both national and county level is crucial for programming and policy formulation.

Recommendations

- There is a need to have sustained investments in data collection, analysis, and monitoring and evaluation systems, as well as the need for sustained funding and prioritisation of gender-related issues in budget planning.

- Establish safe homes and GBV recovery centres to provide runaway girls a place to stay and receive psycho-social support.

b) Eradication of Female Genital Mutilation

Location of the project: 22 FGM hot spot Counties (Migori-Kuria, Kisii, Nyamira, Bomet, Kajiado, Narok, Taita-Taveta, Bungoma - Mt. Elgon, Garissa, Tana-River, Wajir, Mandera, Marsabit, Isiolo, Laikipia, Elgeyo-Marakwet, West Pokot, Baringo, Embu, Tharaka - Nithi, Meru, and Samburu

Objective: To eradicate FGM in Kenya.

Implementing Agency: Anti-FGM Board

Project Progress: County anti-FGM steering committees were launched in 22 FGM hotspot counties to strengthen coordination. Commitment by the Kuria cultural elders from the four clans to end FGM was signed. Youth anti-FGM networks were launched in 11 counties. The Board also established 33 sub-county anti-FGM steering committees, and disseminated Information, Education and Communication materials to 22 FGM hot spot counties; organised dialogue forums with university and college students in six counties; and held cross border engagements with stakeholders from Tanzania to end cross border FGM.

Developed a strategic document, Guideline for Engaging Men and Boys in Ending FGM; and supported Tharaka-Nithi, Kajiado and Narok counties to develop county anti-FGM specific policies. The Board also finalised the acceleration plan to end FGM by 2022; and developed the Costed Cross Border Action Plan to end FGM in Kenya, Tanzania, Uganda, Ethiopia and Somalia.

In addition, the Board conducted a cross border study on FGM in Kenya, Tanzania, Uganda, Somalia and Ethiopia; engaged religious leaders from Migori and Kisii counties to mainstream anti-FGM campaign in their programmes; disseminated guidelines on development of county policies to eradicate FGM to 21 FGM hot spot counties; supported Kisii, Tana River and Migori counties to develop county specific actions plans and minimum service package to end FGM; and trained and recognised 100 anti-FGM champions at the Kenya School of Government. The Board observed all International Days that advocate for the rights of women and girls. These include 16 Days of Activism against GBV, International Day of the Girl, International Day of the African Child, International Day of Zero Tolerance for FGM, International Women's Day and International Widows Day.

Furthermore, the Board sensitised over 5,000 resource persons and duty bearers (NGAO) on the consequences of FGM, legal and policy framework. The Board reached out to over 30 million Kenyans through media engagement on print, electronic and social media with anti-FGM messages.

Implementation Challenges

- Inadequate data thus affecting policy decisions.
- Inadequate monitoring and evaluation systems.
- Inadequate safe spaces for girls facing the risk of FGM.
- The COVID-19 pandemic changed the patterns of FGM that put more girls at risk.
- Humanitarian crises such as drought and hunger also contribute to putting girls more at risk of FGM.
- Inadequate human and financial resources.
- Prosecution of the perpetrators is limited by lack of sufficient evidence in

some cases and long court processes.

- Entrenched social norms that perpetuate FGM.
- Difficulty of hard-to-reach populations especially in remote areas due to inaccessible roads and insecurity.
- Stigmatisation of the girls and women who have not undergone the cut.
- Inconsistency in holding the county/ sub-county anti-FGM steering coordination meetings.
- The absence of county anti-FGM policies and action plans to guide against FGM has hindered implementation of proper interventions in ending FGM.
- Poor coordinated mechanisms of implementation of interventions
- Re-emergence of FGM among communities which had abandoned FGM.
- Emerging trends in the practice of FGM such as secrecy, medicalisation, change of cut and cross border FGM.

Lessons Learnt

- During the review period, the synergy, political and administrative support was key in ending FGM including the Presidential commitment to end FGM and support from NGAO.
- Support from men is critical in the fight against FGM.
- Strengthening collaboration and partnership between state and non-state actors is crucial in addressing FGM.
- Continuous awareness creation is key in changing social and gender norms.
- Availability of up-to-date data at both national and county level is crucial for programming and policy formulation.
- Availability of resources, both technical and financial, is very imperative in the campaign to end FGM.
- A robust monitoring and evaluation, and reporting mechanism is critical for effective implementation of anti-FGM initiatives.
- Emerging trends in FGM pose great challenges towards its elimination.
- Addressing social norms that perpetuate FGM is key in ending FGM.

Recommendations

- Partner with other Government agencies, development partners and civil society organisations in implementation of gender programs.
- More collaboration with the media houses on awareness creation especially on TVs and vernacular radio stations.
- Enhance research and development on FGM monitoring and evaluation systems.
- Enhance budgetary allocation by National and County Governments towards eradication of FGM.
- Setting up of a special court for FGM cases.
- Fast-track the finalisation and implementation of the action plan to end cross border FGM by member states.
- Religious leaders and elders from the 22 hot spot counties who participated in the commitment to end FGM by 2022 to be closely involved in the campaign against FGM.
- The acceleration plan to end FGM by 2022 to be participatory up to communities for ownership and sustainability.

5.5.3. Gender Mainstreaming

Location: Nationwide

Objective: To mainstream gender related issues in the Public and Private Sector.

Implementing Agency: State Department for Gender.

Project Progress: During the review period, the State Department for Gender achieved the following: 464 Officers from MDAs were sensitised/trained on gender mainstreaming; gender mainstreaming guidelines were finalised; and gender sector working group meetings were convened in each quarter. The National Policy on Gender and Development, 2019 was customised by developing a draft Gender Workplace Policy. International gender related days were observed such as the International Women's Day 2021 that was observed on 8th March 2022 at the Kenya School of Government-Lower Kabete.

Implementation Challenges

- Inadequate staffing leading to work overload.
- Inadequate funding for gender programmes has led to low and non-achievement of targets set.
- The COVID-19 pandemic affected some training during the review period.
- Inadequate monitoring and evaluation systems.

Lessons Learnt

- There is a need for adequate staffing, funding, and monitoring and evaluation systems for gender programmes.
- It is important to develop contingency plans for crises such as the COVID-19 pandemic to ensure that progress towards gender equality is not hindered.

Recommendations

- Partner with other Government agencies, development partners and CSOs in implementation of gender programmes.
- Embrace technology in operations such as virtual meetings with stakeholders.
- Develop monitoring and evaluation systems for gender programmes.

5.5.4. Sanitary Towels Programme

Location: All public primary schools in Kenya.

Objective: The overall objective is to provide sanitary towels to all menstruating girls in public primary schools to ensure access, retention, performance, and transition of vulnerable girls in all regions across the country.

Implementing Agency: State Department for Early Learning and Basic Education (Directorate of Primary Education).

Project Progress: The programme was implemented well with an allocation of KSh. 270,408, 000, benefiting 898, 379 girls in public primary schools.

Implementation Challenges

- Limited funds provided by the Government to the programme and, therefore, not able to cover all primary school girls in the puberty stage.
- Sanitary towels are delivered at sub-county offices where primary school headteachers converge to collect the sanitary towels. Schools, therefore, travel long distances and incur a lot of transport costs especially in ASAL areas.
- The girls are given seven packets per year, leaving five months of the year uncovered.

- Menstrual hygiene education is not effectively done at school level and, therefore, girls reach menses with minimal knowledge of menstruation.
- In most schools, sanitary towels are disposed off in the pit latrines. Sanitary towels are not biodegradable hence a big challenge to the environment. Only a few schools have improvised incinerators.
- Most schools have not provided changing rooms for girls.
- Several schools reported that the boy child felt neglected as they witnessed their sisters being provided with the sanitary towels with no appropriate alternative for them.

Lessons Learnt

- Since the inception of the programme in FY 2011/12, approximately 10.5 million girls have benefited from the provision of sanitary towels.
- The provision of sanitary towels has ensured access, retention, performance, and transition of vulnerable girls in all regions across the country.
- The girls now use hygienic methods to manage their menstruation. All the schools have a female teacher in charge who guides the girls.

Recommendation

- Increase funding for the programme to benefit more girls in public primary schools.

5.5.5. Youth Empowerment Centers

Location: Nationwide

Objective: To coordinate provision of youth friendly services.

Implementing Agency: State Department for Youth Affairs.

Project Progress: 17 existing YECs countrywide were renovated; construction of one new YEC commenced; 25 existing YECs countrywide installed with Local Area Network to establish digital innovation hubs; and 25 existing YECs countrywide installed with CCTV to enhance their security.

Implementation Challenges

- Lengthy procurement processes for the construction of new and refurbishment of existing YECs
- Delay in completion of the works for YECs.

Recommendation

- Transform the existing YECs into innovation hubs to tap into the rich youth talent in film, drama, music, graphic design, digital animation, fashion and craft.

5.5.6. Kenya Association of Youth Centres

Location: Nationwide

Objective: To develop a framework for Kenya Association of National Youth Centres

Implementing Agency: State Department for Youth Affairs.

Project Progress: Draft Youth Development Bill developed to anchor the Kenya Association of Youth Centres.

5.5.7. Kenya Youth Employment and Opportunities Programme

Location: Nationwide

Objective: To increase employment and earning opportunities for targeted youth.

Implementing Agencies: State Department for Youth Affairs; National Employment Authority, MSEA, and NITA.

Project Progress: 4,075 youth were placed on internship; 154,653 youth benefited on employment opportunities; 68,493 youth trained in core business skills; 56,135 youth trained in job specific skills; 1,061 master craftsmen trained on pedagogical skills; 28,780 youth assessed and certified. Additionally, KSh 2.2 billion grants were disbursed to business start-ups.

Implementation Challenge

- Inadequate institutions for youth apprenticeships.

5.5.8. National Youth Service Transformation Programme

Location: Nationwide

Project Objective: To re-engineer the structure, processes, and programmes of NYS. In MTP III, NYS targeted to recruit 150,000 and train 75,000 youth in paramilitary and various vocational skills. During the plan period, NYS also targeted to commercialise its production activities to provide more training and employment opportunities to the youth.

Implementing Agency: NYS

Project Progress: 17,346 youth were recruited and trained in paramilitary skills of which 4,746 were females and 12,600 males; 14,595 engaged in tasks of national importance; and 32,861 comprising of 8,444 females and 24,417 males trained in technical and vocational skills and 332 employed in commercial enterprises. During the period under review, KSh. 14.024 billion was required of which KSh. 9.464 billion was disbursed.

Implementation Challenges

- Sustained underfunding resulted in rationalisation of the number of youths recruited from 30,000 to 10,000 annually.
- Delays in exchequer releases hindered timely service delivery and resulted in pending bills and accumulation of unfunded commitments.
- Human resources capacity fell short of expected service regimentation in paramilitary and national service, high teacher student ratio in technical and vocational training and acute shortage of specialised skills for commercial enterprise.
- Inadequate, obsolete, and overstretched infrastructure and facilities for servicemen/women including barracks, dining halls, classrooms, workshops, water and sanitation systems, and security walls/fences in all field units.
- Inadequate employment opportunities for the youth have resulted in an increased number of unemployed NYS graduates.
- The COVID-19 pandemic affected operations of the Service leading to closure of training institutions and slowdown in national service activities.
- The economic slowdown resulting from global events led to budget cuts and delays in the release of the exchequer.

Lessons Learnt

- The NYS training programme resulted in a higher number of jobs seekers as opposed to job-creating graduates, hence the high rate of unemployment among NYS graduates.
- Existing data shows a steady rise in social vices including drugs and substance abuse, unwanted pregnancies, and unacceptable sexual behaviours among

servicemen and women despite life skills training being integrated into the training programmes.

- Partnerships and collaborations increased opportunities for skills development and employment for youth while enhancing NYS public image, visibility, and confidence.

Recommendations

- Revision of NYS budget to correspond with the required youth intake of 30,000 annually.
- Enhance youth skilling and employment opportunities through commercial enterprise development, research and innovation, entrepreneurship and MSME development, and collaborations with disciplined services, other public and private agencies, and global labour markets.
- Strengthen youth sexual and reproductive health, mental, drugs and substance abuse programmes to address social challenges facing the youth.

5.5.9. Youth Cohesion, National Values and Social Development

Location: Nationwide

Objective: To promote peaceful coexistence.

Implementing Agency: State Department for Youth Affairs.

Project Progress: 2,531 staff sensitised on national values and principles of governance, drug & substance abuse and environmental conservation and management. Youth were engaged in environmental conservation where 11,000 tree seedlings were planted. A free messaging platform was available to promote national unity. 12,300 youth were trained in ICT. 25 County Executive Committee members in charge of youth affairs on policy, legal and administrative issues were capacity built. In addition, 17 youth leaders were trained on the rule of law; 4,000 youth were capacity built on national values, leadership, and governance while 5,000 youth were engaged in intercommunal programmes and peace forums.

5.5.10. Youth Employment and Enterprise Development

Location: Nationwide

Objective: To create sustainable employment opportunities.

Implementing Agency: Affirmative Funds.

Project Progress: Two youth SACCOs in Kisumu were operationalised. The inventory of registered youth SACCOs was developed. 31,585 youth were sensitised on Access to Government Procurement Opportunities (AGPO) and a total of KSh. 403.6 million worth of loans was disbursed.

Implementation Challenge

- Inadequate funding and austerity measures hindered project implementation.

5.5.11. Biashara Bank

Location: Nationwide

Objective: To provide coordination in the delivery of affordable financing and support for business development.

Implementing Agency: State Department for Gender.

Project Progress: The initial idea was to establish a Biashara Bank (Commercial Bank) by merging the Kenya Industrial Estates, Development Bank of Kenya, Industrial Development Bank of Kenya, Youth Enterprise Fund and UWEZO Fund to provide coordination in the delivery of affordable financing and support for business development. The idea of Biashara Bank was dropped in favour of establishing a Biashara Fund by merging all the affirmative action funds (UWEZO, Women Enterprise Fund, Youth Enterprise Development Fund, SME Fund etc.) through the Public Finance Management Act. The major objective was to increase efficiency, enhance access to affordable credit and remove duplication in the operations of the funds**.** The legislative proposal to establish the Biashara Fund was approved by the Cabinet. The proposal was, however, not approved by the National Assembly.

Implementation Challenges

- Lack of political good will to enact the Biashara Fund Regulations.
- Inadequate public participation in the development of regulations.

Lesson Learnt

- Adequate public participation is key in ensuring adoption of policy and legislative proposals.

Recommendations

- Digitise the affirmative action funds to offer credit on an online platform to enhance access and increase efficiency.
- Revamp the affirmative action funds and expand the credit that is offered through the Hustler Fund.

5.5.12. National Safety "Inua Jamii" Programme

Location: Nationwide

Objective: To empower the poor and vulnerable to enhance their capacities and opportunities.

Implementing Agencies: State Department for Social Protection and Senior Citizens Affairs, National Council for Persons with Disabilities (NCPWD), Directorate of Social Assistance, Directorate of Social Development, Directorate of Children Services and National Drought Management Authority.

Project Progress: Provided cash transfer to 766,935 older persons and 278,945 households taking care of orphans and vulnerable children under the consolidated cash transfer programme. Additionally, cash transfers were provided to 37,023 households with persons with severe disabilities. 2,322 street families were rehabilitated and reintegrated into the communities.

Implementation Challenges

- Inadequate policy, legal and institutional framework.
- Cash transfer inclusion and exclusion errors.
- Fragmented classification of vulnerable groups under cash transfer initiative.
- Migration of some beneficiaries to the Consolidated Cash Transfer Management Information System who are not on payroll due to exceptions including caregiver's duplication within and across programmes, beneficiaries, and caregivers with minor IPRS issues that require updating and beneficiaries yet to open accounts.
- Late exchequer disbursements which cause delays in payment of cash to the beneficiaries.

Lesson Learnt

- Updating and cleaning of the cash transfer register should be a continuous process to remove untraceable and deceased beneficiaries.

Recommendations

- Establish a coordination mechanism for national safety net/social protection programmes.
- Enhance resource allocation to the State Department commensurate with its importance on socio-economic development.
- Fast-track the approval of the key policies and legislation already in Parliament to enable the State Department to deliver on its mandate.
- Consolidate funds for all vulnerable persons.

5.5.13. Disability Mainstreaming

Location: Nationwide

Objective: To enhance inclusion and accessibility among persons with disabilities.

Implementing Agency: NCPWD

Project Progress: In the review period, 3,223 PWDs were provided with assistive devices; 2,169 learners with disabilities were supported with scholarships; 301 groups of persons with disabilities were supported with grants for economic empowerment; 362 tools of trade were provided to PWDs with vocational skills for economic empowerment; 13 learning institutions were supported with equipment to improve enrolment capacity and learning environment; 366 government workers were supported for Kenya Sign Language training; supported 43 disabled persons' organisations for advocacy and awareness creation; and registered 24,992 persons with disabilities. The Council also provided sunscreen lotions to 5,000 persons with albinism, conducted skin cancer screening to 1,453 persons with albinism (PWAs) and provided 500 of the PWAs with monocular devices.

Implementation Challenges

- Delay by the National Treasury to release the half year approved allocation to finance the planned interventions.
- Increased vulnerability leading to increased demand for services.
- Delay in registration of persons with disabilities due to the lengthy and bureaucratic disability assessment process by the Ministry of Health.
- Low uptake of tenders reserved for persons with disabilities in MCDAs.
- Delays in Government release of funds affected AGPO thus affecting LPO financing.
- Lack of specialist reports in some counties due to lack of trained personnel and equipment.
- Austerity measures during the supplementary budget affected the realisation of the objectives of the flagship project.

Lessons Learnt

- Revamping of registration of persons with disabilities affected the registration's target.
- Maintaining public awareness of the specific reserved opportunities for PWDs like tenders requires continuous investment in communication strategies.

Recommendations

- Timely release of funds by the National Treasury.
- The National Treasury should increase the national development fund for persons with disabilities to upscale implementation of activities in line with its mandate.
- Increase public awareness on the rights of persons with disabilities to reduce discrimination.

- Decentralise the Director of Medical Services signature to the county level to make the registration process easier and faster.
- Lobby for the waiver or subsidised medical assessment charges for PWDs.
- Conduct continuous sensitisation of PWD groups to provide quality goods to promote their uptake on tenders.
- Encourage MDAs to promote equality by giving tenders to all affirmative action groups.
- Enhance commitment by MCDAs to support staff to undergo the Kenya Sign Language training towards improving delivery of services for persons with disabilities.

5.5.14. Child Community Support Services

Location: Nationwide

Objective: To strengthen child protection services.

Implementing Agency: State Department for Social Protection, Pensions and Senior Citizens Affairs (Directorate of Children Services).

Project Progress: Provided presidential bursaries to 22,300 OVCs from poor households in public boarding secondary schools; implemented the Guidelines for the Alternative Family Care of children in Kenya 2014 through networking and support of development partners; assisted 263,346 children in distress situations through the Child Helpline Toll Free 116; issued 426 certificates to the compliant charitable children institutions.

Implementation Challenges

- Inadequate financial and human resources to actualise the implementation of the Children Act.
- Uncoordinated community development programmes.
- Inadequate funding.

Recommendations

- Finalise legislation to strengthen the children protection system and align the existing legislation to the Constitution.
- Build linkages and collaboration with stakeholders to minimise duplication of social protection initiatives.
- Adoption societies need to be trained and given clear guidelines in time to ensure they meet the criteria for registration.

5.6. SPORTS, CULTURE, AND THE ARTS SECTOR

Sports, Culture, and the Arts Sector play a crucial role in overall national development. Kenya continues to excel in sports at international level as well as in preserving its cultural identity and the arts guided by the theme *"Celebrating the Best in Us."* It seeks to intensify efforts to promote sports, national heritage, and culture as well as talents in music and arts. Additionally, the Sector aims at upscaling its support to development of Kenya's film industry while also promoting a reading culture and research through management of libraries and protection of all historical records.

5.6.1. Kenya Academy of Sports

Location: Nationwide

Objective: To serve as a centre of excellence in sports talent development through identification and nurturing of talent, training of sports technical personnel as well as enhancing knowledge and skills through research in sports.

Implementing Agencies: Kenya Academy of Sports, and State Department for Sports.

Project Progress: Phase 1A construction works of the Academy were completed. The facilities completed include a seven-storey hostel building with related works, two football pitches, two basketball courts and one rugby pitch. The Academy initiated Phase 1B which entails completion of interior works of the hostel building from second to seventh floor. Currently, 75 percent of the work in scope is complete. In addition, a total of 2,487 talented youth and 653 coaches and referees were trained. The Academy also hosted its annual sports conference, which attracted a record number of participants from outside the country.

Implementation Challenge

- Inadequate resources for the project and core mandate programmes.

Lessons Learnt

- High level coordination and synchronised channels of communication amongst the stakeholders is critical for successful implementation of the project.
- Strong project implementation committee at Ministerial level improves effectiveness and efficiency in project implementation.

Recommendations

- Source for additional funding from avenues such as the Sports Arts Social Development Fund, public private partnership and donor funding.
- Strengthen project implementation committees at the Ministerial level.

5.6.2. Build and Rehabilitate Sports Stadia

Location: Nationwide

Objective: Provide sports facilities to enable the youth to develop, grow talent, compete in sports, regulate, protect and enforce facility standards to ensure quality access.

Implementing Agencies: Sports Kenya, State Department for Sports, and State Department for Public Works.

Project Progress:

i. Proposed Construction of Jamhuri Sports Ground

Location: Kibera Constituency Woodley along Ngong Road in Nairobi County.

The scope of works included for Phase I; three football pitches, one rugby pitch, 1.7km running track, 3.4km murram running track, children's playing area, ablution blocks, police houses, police post, changing rooms, two picnic sites, a club house, food courts, car park, chain link fence, low level water tank, sewer line, deeper drainage, Gate B access road**,** five earth berm, power distributions and supply installations.

The scope of works for Phase II included perimeter security wall, cabro on the main parking, conversion of the old club house into offices, chain link fence for police post and residential houses, office block pump room, sentry box, ablution block 3, food court 1, 2 & 3 and additional access ramps & staircase.

Police post and pedestrian gate, football pitch, one running truck area additional asphalt layer, paint works for office block main car park, sewer line for office block, precast ring installation works and connection to main sewer line, field area (drainage swales) excavation, grass planting, earth beam north of football pitch 1, 2 and basketball, netball, volleyball pitches grass watering and weeding works. Three food courts, supply, installation of grease traps, ablution block testing work, office block mechanical ventilation fixing, supply of kitchen equipment, provision of internal waterfowl, mechanical fittings installation, two changing rooms, ablution block and office block electrical fitting works. The overall scope of work for Phase I was 100 percent complete. Phase II was 70 percent complete.

Jamuhuri Gardens

Proposed Construction of Wanguru Stadium

Location: Mwea Constituency in Kirinyaga County

The scope of works included Phase I: Construction of VIP pavilion, external and internal wall, half stands, football pitch, running track, two ablution blocks, VIP pavilion, public terraces, football pitch, athletic track and changing rooms.

The scope of works included for Phase II was demolition of pit latrine, VIP extension, additional girder beam, walls, timber surfaces (doors and window boards), steel surfaces (steel doors and windows), steel doors (external doors), mounting external grilled steel doors for (VIP extension) boundary wall, gates and gates houses, wall finishes to the main gate house, mechanical fittings, parking, walkways, driveways, culverts for accessing running track, walk way to pump and ablution block. The overall scope of work for Phase I and Phase II was 100 percent completed.

Wanguru Stadium

ii. Proposed Construction of Kirigiti Stadium

Location: Kiambu Constituency in Kiambu County

The scope of works included Phase I; Eastern pavilion, Western VIP pavilion, Northern pavilion, Southern pavilion, drainage works, internal roads, pavements parking, football pitch, four washrooms, four changing rooms, ablution block, kitchen, landscaping and associated electrical and mechanical works. The overall scope of work for Phase I was 100 percent completed.

Kirigiti Stadium

Implementation Challenges

- Delays due to weather challenges.
- Omissions of work which led to variations of the original contracts.
- Delays in approval of financial appraisals.
- Delay in disbursement of funds for the projects.

Lesson Learnt

- Timely disbursal of budgetary allocation is necessary to expedite projects.

Recommendations

- Timely disbursement of funds.
- Need for an increase of funding for timely delivery of projects.

Collaboration between the implementing agencies for timely financial appraisals.

5.6.3. Anti-Doping Promotion

Location: Nationwide

Objective: To carry out the fight against doping in sports through anti-doping value-based education, sensitisation and awareness campaigns and protecting the "clean athlete" through effective doping tests.

Implementing Agency: Anti-Doping Agency of Kenya (ADAK)

Project Progress:

i. ***Carrying out Intelligence-Based Tests;*** The Agency carried out 1,236 intelligence-based tests representing 137.33 percent of the target which was 900 intelligence – based tests, an increase of 38.56 percent from the 892 intelligence – based tests carried out during the financial year 2020/21. The increase was attributed to the resumption of sporting activities post COVID–19 pandemic.

ii. ***Carrying out Anti-Doping Education Programmes;*** The Agency reached out to 14,550 persons who represent 139.26 percent of the target number which was 10,600 persons. An increase of 241.5 percent from the 6,024 people reached during the financial year 2020/21.

iii. ***Carrying our Result Management on Anti-Doping Rule Violations;*** All cases requiring prosecution were processed to the tune of 100 percent. 18 cases were prosecuted consisting of 15 new Anti-Doping Rule Violations and three appeals. Common offences consisted of 13 cases of presence of prohibited substances: one each for failure and refusal to submit to doping control. 13 samples were collected by ADAK. Two samples were collected by other anti-doping organisations. Out of the 18 cases, 14 were athletes and four were footballers consisting of eight male and 10 female.

Implementation Challenges

- Increased cases of doping by some athletes in international competitions.
- Allegations in the media watered down efforts that produced exemplary performance by clean athletes at the global stage.
- Technological advancement in the use of prohibited substances by some athletes seemed to be ahead of anti-doping measures.
- Lack of an accredited laboratory in Kenya made it very expensive to conduct doping tests hence low coverage in testing.
- Late disbursement of funds
- Some athletes declined to appear before the Sports Dispute Tribunal (SDT).
- Increased cases of athletes participating during periods of ineligibility.
- Increased cases of athletes failing to apply for Therapeutic Use Exemption (TUE) and thus exposed them to unwarranted sanctions.
- Low uptake of cases by pro-bono counsels.

Lessons Learnt

- Innovation and use of technology during the pandemic such as the ADAK eLearning portal played a big role in anti-doping information to persons of interest, results management on anti-doping rule violations through online platforms saved numerous resources.
- Some athletes who declined to appear before the SDT have been sanctioned but soon thereafter devised ways of changing their names and competing under new identities.
- Publication of the names of athletes facing doping charges is a form of deterrence.
- Certain substances have become common, leading to new trends in doping meaning that there must be a single source supplying athletes with these substances.

Recommendations

- Promote value-based anti-doping education by integrating in the schools' curricula to impart values among students/athletes for prevention of doping at an early age.
- Establishing a World Anti-Doping Agency accredited laboratory to reduce the cost of anti-doping tests.
- Timely disbursement of funds to enable timely implementation of the programmes.
- Athletes must be educated on TUE and the process of applying for TUE should be simplified.
- The Sports Act should be amended to give the SDT power to issue warrants of arrest against athletes who decline to appear before it.
- The ADAK anti-doping rules and by extension the World Anti-Doping Code need to be amended to declare participation during a period of ineligibility as a second Anti-Doping Rule Violation (ADRV).
- The Anti-Doping Act to be amended to provide for a timeframe within which a criminal doping case must be heard, concluded and a judgement rendered.
- Pro-bono counsels to be trained to enhance their abilities to defend athletes in ADRV cases.
- The Sports Fund to establish a fund to cater for pro-bono counsels, amount equivalent to the one payable to pro-bono counsels in murder cases.
- Institute staggered appointments of the members of the Sports Dispute Tribunal to reduce the chances of having a vacuum when the terms of the members lapse.

5.6.4. The National Sports Lottery

Location: Nationwide

Objective: To mobilise resources for supporting the sports, culture, and arts industry in the country.

Implementing Agencies: State Department for Sports, and Sports, Arts, and Social Development Fund.

Project Progress: The National Sports Fund became defunct thus the National Sports Lottery was discontinued.

Implementation Challenge

- Effective implementation of the above targets requires a coordinated multi-agency approach.

Recommendation

- Establish an oversight multi-agency coordinating committee for UHC programmes.

5.6.5. National Library of Kenya

Location: Nairobi

Objectives: To increase access to information and knowledge for empowerment of all Kenyans.

Implementing Agency: Kenya National Library Service.

Project Progress: The project was 100 percent completed. The project was completed and handed over to Cabinet Secretary, Ministry of Sports, and Heritage, and Kenya National Library Service on 19th August 2022 and was officially opened by the President on 13th November 2022.

Implementation Challenge

- Inadequate funding delayed the completion of the project which also led to cost overruns.

Lesson Learnt

- Inadequate provision of funds to projects leads to time and cost overruns.

Recommendations

- There is a need to provide adequate funds for projects.
- The funds should be released on time to avoid implementation delays and penalties from contractors.

5.6.6. The International Arts and Culture Centre

Location: Nairobi

Objectives: To provide infrastructure for cultural development.

Implementing Agency: Kenya Culture Centre

Project Progress: The project is at 0.75 percent completion level having only been funded with KSh. 22.5 million out of the total project estimated cost of KSh. 3.0 billion. The project has stalled and is behind schedule. The last funding to the project was made in FY 2018/19.

Implementation Challenge

- The major implementation challenge is the lack of funding. No funding has been allocated for the project since FY 2018/19. Inadequate funding in the FY 2017/18 and FY 2018/19 hindered the achievement of some crucial preliminary steps of the project such as the finalisation of public participation.

Lessons Learnt

- No progress can be made without funding.
- The Centre needs to seek alternative modes of funding the project by approaching external donors and financiers.

Recommendation

- The Kenya Cultural Centre should continue to lobby the National Treasury and external donors and financiers to support the project.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6. CHAPTER SIX

POLITICAL PILLAR

"Moving to the Future as One Nation"

The Kenya Vision 2030 takes cognisance of the importance of a democratic society that adheres to the rule of law and respects individual liberties. The Political Pillar envisages the transformation of the country's political governance system and a democratic political system that is issue-based, people-centred, result-oriented and accountable to the public. Transformation within the political pillar cuts across the following strategic thrusts: devolution; adherence to the rule of law, issue-based politics; people-centred and politically engaged society; transparency, accountability, ethical and results-oriented government institutions; policy driven and service-focused government institutions; and security for all Kenyans. Since the inauguration of the Constitution in 2010, Kenya has made enormous strides in advancing devolution, promoting public participation in policymaking, and in strengthening the three arms of government: the Executive, Judiciary and Legislature. The Pillar has two sectors: (1) Devolution, and (2) Governance and Rule of Law.

6.1. DEVOLUTION SECTOR

"Making Devolution Work: A Catalyst for Holistic, Transformative and Sustainable Development"

Devolution is by far one of the most significant initiatives in governance undertaken since independence and is a key sector under the Political Pillar. The system of devolved government in Kenya was introduced by the Constitution as a key pillar of the country's governance system. The Constitution prescribes devolution and sharing of power as part of the national values and principles of governance that underpin Kenya's governance system. The devolved system of government has been implemented since 2013 with a significant level of success, including transfer of functions to county governments, preparation of a devolution policy and alignment of sectoral laws to the Constitution. The Sector has six flagship programmes/projects in MTP III, of which are undergoing implementation. The performance for the various projects is presented below.

6.1.1. Devolution Policies and Legal Reviews

Objective: Devolution policies and legal reviews aimed at deepening devolution through strengthening policy, legal and institutional frameworks for devolution, developing and implementing laws for devolved units, urban planning, and management.

Implementing Agencies: Ministry of Devolution, Arid and Semi-Arid Lands, and Kenya Law Reform Commission.

Project Progress: The target was to develop and review laws, regulations, and policies relating to the devolved system of government. Two regulations were developed in the County Governments Act, 2012 and Intergovernmental Relations Act, 2012 and submitted to the Cabinet. Conceptualisation and development of a policy framework for performance of concurrent functions was done and the inception report by the consultant received. Review policy on the devolved system of government working draft report has been developed ready for stakeholder engagement and final output expected by 30th September 2023. Model Bills on physical planning and land use have already been finalised.

Implementation Challenges

- The lengthy supplementary process stalled implementation of planned projects.
- COVID-19 pandemic slowed implementation of projects, especially those that required stakeholder engagement.

Recommendations

- The National Treasury should consult MDAs before slashing budgets during supplementary.
- MDAs should embrace the use of technology when engaging stakeholders especially during this period of COVID-19 pandemic. This will ensure continuity in project implementation as well as cutting costs.

6.1.2. Capacity Building and Technical Support for Implementation of Devolution

Objective: To strengthen the competencies of county governments through capacity building, civic education curriculum revised technical support and public participation through gazettement and implementation of the National Capacity Building Framework.

Implementing Agency: Ministry of Devolution and the ASALs

Project Progress:

i. ***Strengthen County Governments Competencies:*** The MTP III target was to capacity build and technically support county governments and on this, the National Capacity Building Framework II (2022-2027) was reviewed and finalised. The development of assessment framework for the performance of county governments was also finalised.

ii. ***Improve Participation of Citizens in County Development:*** NCBF was developed and rolled out. Civic education curriculum revised but not implemented. Civic education campaigns on devolution were conducted in five out of 47 counties and the Jukumu Letu Manual that guides civic education was rolled out in all counties.

6.1.3. Planning, Budgeting, Financial Management and Resource Mobilisation

Objective: To strengthen planning, budgeting, public financial management and resource mobilisation at the county level.

Implementing Agencies: The Ministry of Devolution and the ASALs, Commission on Revenue Allocation (CRA), and the National Treasury.

Project Progress: ***Division and County Allocation of Revenue:*** Prepared and submitted to the Senate the recommendation for revenue sharing between the national and county governments for financial year 2022/23, based on revenue projections of KSh. 2.14 billion. This entailed allocation of KSh. 1.77 trillion to the national government, KSh. 370 billion to county governments, and KSh. 6.8 billion for the Equalisation Fund. Additionally, CRA reviewed and submitted recommendations to the National Assembly and Senate, Bills dealing with sharing of revenues or financial matters concerning county governments. The Bills included the Division of Revenue Bill, County Allocation of Revenue Bill and County Additional Allocation Bill, 2022 among others.

CRA published the Third Edition of the Kenya County Fact Sheets. The report provides data on various socio-economic indicators for the national and county governments including health, education, poverty, roads, water and sanitation, electricity and population. The Fact Sheets are useful for policy formulation and planning at the national and county levels.

Prudent Public Financial Management: To boost fiscal responsibility in county governments, CRA prepared County Recurrent Expenditure Budget Ceilings for Financial Year 2022/23. The ceilings provide controls that balance expenditure and enhance fiscal discipline among the devolved units. In the reporting period, CRA also supported counties to establish and operationalise county budget and economic forums (CBEFs). Enhancing the capacity of CBEFs strengthens the capacity of county public finance structures. Additionally, CRA reviewed the CBEF effectiveness tool used to evaluate the effectiveness of the CBEFs in planning, budgeting, financial management and public participation.

During the reporting period, CRA encouraged fiscal responsibility in county governments through the County Creditworthiness Initiative (CCI) and the development of a market-based product(s) for county governments. CRA through World Bank Group support conceived the CCI for Kenya in 2019 to increase counties' county governments in bridging the creditworthiness gap and access market finance for infrastructure and other development projects. 11 counties were sensitised on the creditworthiness initiative, with Laikipia, Bungoma, Makueni, Kisumu, Mombasa, and Nyandarua being credit rated in the reporting period.

County Own Source Revenue: In the financial year 2021/22, county governments collected OSR amounting to KSh. 36 billion against the target of KSh. 60 billion. This represented an OSR performance of 76.5 percent and was an improvement from the previous financial year 2020/21 (34 billion). In the reporting period, CRA supported county governments to improve their own source revenue collection through development of counties' OSR Potential Report. The report determined the maximum possible own-source revenue that each county government can collect from their most important revenue streams when applying best practices in revenue administration. The study estimated the potential for own-source revenue for county governments to be KSh. 216 billion. Additionally, CRA trained 45 County Assemblies and county governments' technical staff on model laws on revenue administration. A report on County Assemblies' OSR Training was produced and disseminated widely to key stakeholders and the wider public. The report provides recommendations on how to strengthen county governments' financial management.

Policies Identifying Marginalised Areas: CRA developed and published the 2022 State of Inequality in Kenya Report. The Report sought to, among other objectives, establish and analyse the state of inequalities in Kenya. The Report presented data and information on various social and economic indicators to assess the current status of inequality across counties in different sectors of the economy, namely, health, education, roads, water and sanitation, and energy with reference to baseline status for 2012/13. The Report presents the milestones achieved by the different counties during the devolution period.

Implementation Challenges

- Inadequate data due to the reluctance of most counties to prepare comprehensive county statistics.
- Inadequate budget to undertake dissemination of the programme reports.
- Lack of a comprehensive definition of all counties own source revenue (OSR)

streams leading to low collection, reporting and analysis of OSR.

Lessons Learnt

- Continuous engagement of stakeholders at the national and county level is important for the success of devolution in Kenya.
- There is a need for counties to focus on key revenue streams to minimise the cost of collection and enhance accountability.

Recommendations

- The national government should continue to build the capacity of the county government on public financial management.
- Counties should strive to optimise revenue collection to address the challenge of pending bills.
- CRA to continue working with various stakeholders to ensure that robust revenue administration systems are in place across all counties.

6.1.4. Intergovernmental Relations and Structures

Objective: To strengthen intergovernmental relations and structures through review of the Intergovernmental Relations Act 2012 and development of attendant regulations.

Implementing Agency: The Intergovernmental Relations Technical Committee.

Project Progress: ***Strengthen Intergovernmental Structures and Relations***: Developed, reviewed, finalised and gazetted laws and regulations to strengthen intergovernmental sector forums. Resolutions of devolution conferences for FY 2019/20 and the Summit resolutions for FY 2020/21 were implemented at 80 percent and 100 percent implementation rate, respectively.

Management of Public Assets and Liabilities Improved: Assets and liabilities for the devolved functions were identified, verified, and transferred to all the 47 counties. Transfer of assets and liabilities of defunct local authorities, the devolved functions, and parastatals where valuation is required is still ongoing. Identification of assets of devolved functions in counties was completed at 100 percent as at June 2022, but the valuation of the same had stalled at 45 percent due to budgetary constraints. This was behind schedule.

Implementation Challenges

- The COVID-19 pandemic affected implementation of the planned activities.
- Budgetary constraints
- Slow implementation of forum resolutions

Recommendations

- Increase in budgetary allocation for proper implementation of the planned activities.
- Measures should be put in place to fast-track implementation delays.

6.1.5. Development of Industrial Clusters and Products

Objective: To promote the development of industries in each county based on products and resource potential unique to each county through development of industrial clusters covering various counties.

Implementing Agency: Ministry of Devolution and ASALs.

Project Progress: Seven intercountry industrial clusters which were supposed to be developed based on regional economic blocs were not done. On establishing 47 county specific product-based industries, 17 industries were established in 15 counties with support from the European Union. On average, implementation status is approximately 90 percent.

6.2. GOVERNANCE AND THE RULE OF LAW SECTOR

"A Secure, Just, Cohesive, Democratic, Accountable, Transparent and Conducive Env***ironment for a Prosperous Kenya"***

The Governance and the Rule of Law Sector aims at ensuring effective, accountable and ethical leadership, and promotion of a just, democratic society in line with the Constitution and laws of the country. It is also intended to provide a secure environment and strong governance institutions that will propel citizens to full attainment of stable and sustainable socio-economic and political development. Further, the Sector facilitates the necessary legal framework for the "Big Four" initiatives including the implementation of the SDGs, the Paris Agreement on Climate Change, and the Africa Agenda 2063.

The Sector has six flagship programmes/ projects in MTP III all being implemented nationwide. The performance for the various projects during the review period is presented in the following section:

6.2.1. Implementation of Constitutional and Legal Reforms

Objective: To facilitate effective implementation of the Constitution and legal reforms through harmonising, reviewing, and developing laws to implement the Constitution and offering technical assistance to MCDAs to enhance compliance and conformity of existing laws with the Constitution.

Implementing Agencies: Office of Attorney General and Department of Justice, and Kenya Law Reform Commission

Project Progress: During the review period, Kenya Law Reform Commission developed seven laws for constitutional implementation as follows; Policy on National Civil Registration (Huduma Namba Policy), Data Protection Regulations, Kenya Literature Bureau Bill, Kenya Forestry Research Institute Bill 2022, National Hospital Insurance Fund (Amendment) Bill 2021 and Hire Purchase (Amendment) Bill 2021. Five laws for constitution implementation were reviewed as follows: power of mercy laws, Co-operative Societies Act, National Film Policy & Bill, Privatization Act and Fish Levy Trust Fund Regulations. Further, implementation framework for audit of national and county legislation was developed, and two county legislations audited to ensure compliance with the Constitution and national legislation. These were the Turkana County Extractive Bill and Marsabit Health Services Bill.

Implementation Challenges

- Delay in appointment of Kenya Law Reform Commission members hindered implementation of some critical initiatives.
- Inadequate budgetary allocation and delay in the release of the Exchequer funds.
- Inadequate automation.
- Short notice assignments and insufficient instructions from MCDAs.
- Staffing capacity constraints.

Lesson Learnt

- Donor support is key in supplementing government support.

Recommendations

- To counter the challenge of budgetary constraints, forming continuous partnerships with development partners helps to bridge this gap.
- Capacity empowerment of legal staff to ensure service delivery and value for money.
- Put up security measures/infrastructure and ensure strict adherence to security guidelines.
- Use of other information dissemination modes such as webinars when engaging stakeholders in the development of bills and review of laws.
- Build the capacity of County Governments in drafting and enacting of county legislation.
- Advancement in ICT presents opportunities to leverage the same in the conduct of business and seamless flow in service delivery. It has enabled the access of existing law electronically, which helps with consistency, cross-referencing and law revision exercise.
- Leverage on emergence of new areas including digital assets and disruptive technology which necessitate development or amendment of existing legislation to accommodate the new changes.

6.2.2. Leadership, Ethics, and Integrity

Objective: To strengthen legislative, policy and institutional frameworks for leadership, ethics and integrity by developing whistleblower protection mechanisms, asset tracking and recovery, framework for wealth declaration, leadership and integrity framework, and strengthening of multi-agency collaborations. It will also implement bilateral and multilateral leadership, ethics and integrity agreements.

Implementing Agencies: Office of Attorney General and Department of Justice, EACC, and ODPP.

Project Progress: During the period under review, the Office of Attorney General and Department of Justice developed the Whistleblower Protection Bill and submitted it to the Cabinet. Towards strengthening the anti-corruption awareness in the country, the National Anti-Corruption Campaign Steering Committee established five County Anti-Corruption Civilian Oversight Committees in Mandera, Samburu, Tharaka Nithi, Tana River and Murang'a counties.

The Ethics and Anti-Corruption Commission had 457 cases under investigation for corruption, economic crime, bribery, and unethical conduct. A total of 154 case files on corruption, economic crime and unethical conduct were finalised and submitted to the ODPP for action. Out of the 154 files submitted to the ODPP, 97 were recommended for prosecution, nine files for administrative and other actions, and 48 files for closure. Further, a total of 76 bribery cases were completed out of which 24 were taken to court, 44 closed, and eight referred to other institutions. The Commission also completed 52 investigations into violations of Chapter Six of the Constitution, and Leadership and Integrity Act.

Sixty cases of corruption, economic crime and unethical conduct were finalised in court out of which 30 were convictions, 27 acquittals and three withdrawals. The Commission released several high-level convictions with fines of up to 9.4 billion and custodial sentences of up to 24 years. Some of the convicts were barred from holding appointive and elective positions in the public service for a period of 10 years. Further, the unethical cases against public officers with fake academic qualifications were concluded in court where orders to refund salaries were granted. The Commission carried out 25 proactive investigations which resulted in averting possible loss of public funds of approximately KSh. 4 billion.

The Commission also completed 33 asset tracing inquiries in respect of illegally acquired and unexplained assets with the estimated value of KSh. 11.2 billion. The Commission filed 17 applications for preservation of assets valued at approximately KSh. 968 million. Preservation and injunctive orders were granted for the applications. A total of 24 recovery suits involving assets with an estimated value of KSh. 7.78 billion were filed. The Commission recovered public assets with an estimated value of KSh. 940 million during the period under review.

EACC also recovered 39 title deeds for parcels of land worth KSh.5.2 billion corruptly acquired from various public entities and at both the national and county governments. The property recovered by the EACC included 14 parcels of land registered in favour of the National Treasury valued at KSh.603 million; 227.9Ha of land belonging to Kenya Agricultural and Livestock Research Organization valued at KSh.2 billion; 69.2Ha of land belonging to Kenya Railways Corporation valued at KSh.2 billion; land belonging to county governments of Uasin Gishu valued at KSh.570 million, Kisii valued at KSh.64 million, Nakuru valued at KSh.30 million; Kisumu valued at KSh.10 million; Bomet valued at KSh.8 million; and land belonging to Nakuru Muslim Primary School valued at KSh.8 million.

In relation to Chapter Six of the Constitution, EACC issued 286 advisories, 38 cautions and five notices to public entities and people for violation of Chapter Six and the Leadership and Integrity Act. During the reporting period, the Commission finalised 22 examination reports covering systems, policies, procedures and practices and six reports on corruption risk assessments conducted in Mombasa, Bungoma and Isiolo counties. The Commission mainstreamed integrity in learning institutions whereby a total of 178,550 learners in 304 institutions of learning were sensitised. The Commission also engaged professional and community networks across the country in its effort to mobilise critical mass required for effective corruption prevention where 44 professional networks and 121,610 members were reached. The National Integrity Academy trained over 995 Integrity Assurance Officers drawn from 74 institutions while 25 senior officers were taken through the leadership and integrity course.

The Commission maintained strategic linkages and partnerships with national, regional, and international organisations to provide support, enhance coordination of an inclusive framework on the fight against corruption, and optimise on their respective capabilities and strengths. The Commission partnered with the European Union; the United Nations Office on Drugs and Crime; the US Embassy; the British High Commission; the Deutsche Gesellschaft für Internationale Zusammenarbeit; Faith Based Organisations; Media; Civil Society organisations; and National Council on the Administration of Justice.

Implementation Challenges

- Inadequate or lack of information on publicly funded projects and programmes for social audit exercise.
- Politicisation of the fight against corruption.
- Inadequate legal and regulatory framework for enforcement of Chapter Six of the Constitution, Leadership and Integrity Act, Anti-Corruption

and Economic Crimes Act and other complementary legislation.

- Slow legal reform process.
- Constitutional petitions and judicial review applications that impede execution of the Commission's mandate.
- Slow judicial processes are due to a backlog of cases in courts.
- Intimidation of witnesses due to weak witness protection framework.
- Frustration of investigation process by suspects who are in office.
- Inadequate budgetary allocation.

Recommendations

- Lobby Parliament to legislate appropriate laws.
- Ensure that public entities adhere to the requirement and guidelines of prevention of bribery and corruption under the Bribery Act, 2016.
- Leverage on the goodwill from Kenyans in the fight against corruption and unethical conduct.
- Prioritise high impact and asset recovery cases.
- Strengthen cooperation with public institutions to ensure speedy conclusion of investigations.
- Seek budget enhancement to adequately resource programmes and recruit, train and retain competent professionals.

6.2.3. National Cohesion and Integration

Objective: To promote national unity by facilitating processes and policies that encourage elimination of all forms of ethnic discrimination irrespective of background, social circle, race, and ideological belief(s).

Implementing Agency: National Cohesion and Integration Commission.

Project Progress: During the reporting period, the Commission enhanced its focus on conflict resolution, sensitisation, and capacity building, promoting early warning and early response mechanisms and rapid conflict analysis. In addition, the Commission promoted inclusivity in employment in public institutions through ethnic and diversity audits of state agencies. To address hate speech and ethnic contempt, the Commission continued to receive and process complaints and investigations.

The Commission conducted a national conflict hotspot mapping in 47 counties to establish the conflict hotspot counties to inform targeted interventions. In addition, a rapid conflict analysis was conducted in 15 counties namely, Narok, Nakuru, Kisumu, Kakamega, Nandi, Trans-Nzoia, Uasin Gishu, Machakos, Mombasa, Kilifi, Kiambu, Nyeri, Nairobi, Laikipia and Kericho. The national conflict mapping identified 23 counties as hotspot counties and targeted interventions put in place to mitigate the conflicts. In addition, the Commission strengthened early warning and early response mechanisms by conducting EWER baseline mapping in six counties: Narok, Nandi, Kakamega, Mombasa, Nairobi and Nairobi to assess the current EWER mechanisms as well as strengthening the capacity of peace structures (Peace Committees, Nyumba Kumi, Chiefs and peace actors) in the six counties.

To enhance inter and intra-community dialogues, mediation and reconciliation, the Commission conducted community dialogue forums and mitigated conflicts in 22 counties namely, Nakuru, Narok, Nandi, Kisumu, Mombasa, Mandera, Baringo, Samburu, Marsabit, Nairobi, Laikipia, Nandi, Kericho, Wajir, Meru, Uasin Gishu, Narok, Nairobi, Narok, Nakuru, Mandera, and Turkana. As a result of the dialogues, community peace pacts and declarations were signed and enforced. In addition, the Commission conducted training and capacity building for peace actors and stakeholders (youth, women, and community leaders) on peace and cohesion in seven counties namely, Kakamega, Mombasa, Kisumu, Uasin Gishu, Nandi, Kilifi, and Nakuru where 414 people were trained.

Further, the Commission conducted sensitisation forums for peace actors, stakeholders, and the citizenry to promote peace, cohesion and national values in 21 counties namely, Nakuru, Kericho, Nandi, Kisumu, Kajiado, Nairobi, Nyeri, Murang'a, Mombasa, Nakuru, Nandi, Trans-Nzoia, Uasin Gishu, Baringo, Garissa, Kakamega, Embu, Narok, Nyamira, Turkana, Laikipia. As a result of the sensitisation, 4,608 people (youth, women and elders) were reached directly.

To support and enhance a safe digital space in the management of hate speech and ethnic contempt, the Commission continuously monitored political meetings, media houses as well as social media platforms. In the period under review, 245 incidences of hate speech and ethnic contempt were identified from social media platforms and were flagged for investigation. In the same period, the Commission managed 53 cases of hate speech and ethnic contempt, out of which 32 are under investigation, nine are under conciliation, five are before court and seven have been concluded.

Implementation Challenges

- Budgetary constraints leading to inadequate staff and limited regional presence to upscale and sustain interventions at the grassroots level.
- Multiplicity of emerging drivers of conflicts and violence.
- Slow judicial process in the determination of hate speech, ethnic contempt, and incitement to violence cases.
- Limited resources to ensure the sustainability of community social contracts and peace agreements.
- Proliferation of online hate speech remains a major challenge for the Commission going forward, particularly as internet penetration continues to grow across Kenya.

Lessons Learnt

- Community engagement in conflict management leads to sustainable peace and stability.
- Peace and reconciliation processes are not isolated events but rather continuous processes requiring consistent engagement.
- Citizens' expectations of public service delivery influence their attitudes, behaviour, and trust levels in government agencies.

6.2.4. Legal Aid and Awareness

Objective: To enhance access to legal aid services by the indigent, marginalised and vulnerable persons through decentralisation of legal aid services to additional counties and provision of direct legal aid to vulnerable citizens.

Implementing Agency: National Legal Aid Service

Project Progress: The National Legal Aid Service offered direct legal aid services to 27,600 indigent, vulnerable and marginalised citizens. The legal aid services provided included legal advice, representation in selected cases, and assistance in resolution through meditation as an ADR mechanism and assistance in drafting of court documents. A total of 945,253 persons received indirect legal aid through radio talks shows and mobile legal aid clinics.

Implementation Challenges

- Inadequate human resource: lack of enough human resource to adequately handle the increasing number of Kenyans seeking legal aid services. This has greatly impacted on the provision of the services.
- Inadequate funds and budget cuts: Inadequate funds make it difficult to plan and implement activities.
- Slow implementation of the eligibility criteria that can be used in determination of suitable persons to provide the legal aid services hence hampering access to justice.

Lessons Learnt

- For effective legal aid service delivery, there is a need to embrace a mixed model consisting of awareness creation, ADR, self, and legal representation.
- Need for a regulatory framework to determine eligibility for legal aid to mitigate high public expectations.
- Donor support is key in supplementing government support.

Recommendation

- The National Legal Aid Service should be delinked from the State Law Office to enhance efficiency in service delivery.

6.2.5. Judicial Transformation

Objective: To transform the judiciary into an effective and independent custodian of justice through improving court procedures, processes, organisational culture, and management to re-orientate them towards a culture of responsive, proactive, friendly, effective, and accessible service delivery.

Implementing Agency: Judiciary

Project Progress:

i. **Recruitment of Judges and Magistrates:** The judge-to-population ratio was 1:271,796 in FY 2021/22 compared to 1:317,095 in FY 2020/21. The appointment of 65 magistrates lowered the magistrate-to-population ratio from 1:90,426 in 2020/21 to 1:89,580 in 2021/22. In addition, 15 deputy registrars and assistant registrars were hired to facilitate efficient case management.

ii. **Establishment of New Courts and Registries:** The judiciary achieved the following in the establishment of sub-registries and courts.

   a. Two sub-registries of the Supreme Court were established in Mombasa and Kisumu, while five sub-registries of the Court of Appeal were made operational in Busia, Kakamega, Meru, Garissa and Kisii. In addition, the High Court established sub-registries in Isiolo, Kapsabet, Eldama Ravine, and Kilgoris. Further, 11 full registries were established in Kajiado, Thika, Eldoret, Nyeri, Naivasha, Nakuru, Kakamega, Mombasa and Kisumu as well as one sub-registry in Makueni.

   b. The Employment and Labour Relations Court upgraded the Bungoma and Malindi sub-registries to court stations, and 11 new Environment and Land Courts were established in Nyamira, Kapsabet, Isiolo, Siaya, Vihiga, Homa Bay, Nanyuki, Iten, Kitui, Kwale, and Kilgoris.

   c. Twelve Small Claims Courts were established in Milimani, Kajiado, Machakos, Nyeri, Naivasha, Nakuru, Eldoret, Kakamega, Kisumu, Mombasa, Thika, and Meru.

d. Five Magistrates' Mobile Courts were established in Waldena, Marigat, Kalobeyei, Magarini and Magadi.

e. Court Annexed Mediation was implemented in eight courts, namely, Siaya, Kerugoya, Nanyuki, Kitale, Kapsabet, Kiambu, Meru and Chuka.

iii. **Court Construction:** Court constructions: 27 court buildings were constructed and completed in Iten, Kigumo, Chuka, Vihiga, Nyando, Molo, Oyugis, Nyamira, Muhoroni (Tamu), Engineer, Makindu, Nanyuki, Nakuru, Garissa, Isiolo, Kakamega, Ol-Kalou, Kajiado, Mombasa, Kwale, Kangema, Makueni, Maralal, Kibera, Siaya, Kapenguria and Butali. An additional 21 courts were at an average of 78 percent level of completion.

iv. **Operationalisation of Court Annexed Mediation:** Court Annexed Mediation has been operationalised in 50 court stations comprising 16 High Court stations, 5 Employment & Labour Relations Court stations, 12 Environment and Land Courts stations, and 17 Magistrates' Courts stations.

v. **Court Automation:** Case Tracking System was implemented in 128 court stations across the country, and e-filing was made operational in all courts in Nairobi, including all Kadhis Courts and Tribunals in Mombasa. Document management and digitisation of court files were rolled out in 19 out of 128 court stations, while the Court Recording and Transcription System was implemented in 32 out of 654 courtrooms. As a result of the COVID-19 pandemic containment measures, there was a significant increase in the use of virtual courts nationwide.

vi. **Tribunals Transiting to the Judiciary:** Twenty tribunals transited into Judiciary, namely; Business Premises Rent, Communication Multimedia Appeals, Competition, Co-operative, Copyright, Education Appeals, Energy and Petroleum, HIV & AIDS, Industrial Property, Legal Education Appeals, Micro Small Enterprise, National Civil Aviation Administrative Review, National Environment, Political Parties Dispute, Public Private Partnership Petition Committee, Rent Restriction, Sports Disputes, Standard, State Corporation Appeals and Transport Licensing Appeals Board.

vii. **Operationalisation of Judiciary Fund:** Operationalised Judiciary Fund to protect the financial and operational independence of the Judiciary, ensure accountability for funds allocated to the Judiciary, and ensure that the Judiciary has sufficient resources to carry out its mandate.

viii. **Caseload Statistics:** A total of 404,312 cases were filed between July 2021 and June 2022, and 381 317 cases were resolved during the same time frame. The case backlog of cases older than three years decreased by 21 percent from 150,376 in June 2021 to 120,294 in June 2022. In FY 2020/21 and FY 2021/22, the case clearance rate was 83 and 95 percent, respectively.

Implementation Challenges

- **Insufficient Funding**: The Judiciary has been underfunded over the years where the annual allocation has continuously been less than half of the resource requirements. This budget shortfall has affected the administration of justice in key areas such as establishment and construction of courts, facilitation of benches, operationalisation of small claims courts, court annexed mediation, Alternative Justice System, service weeks, pro bono, mobile courts, and circuits have been scaled down due to lack of adequate resources. In addition, the Judiciary is unable to recruit an adequate number of Judges, Judicial officers and staff that are required to effectively handle the workload since the current staffing levels fall below the optimal number as per the Judiciary establishment. The resource gap for the Judiciary over the last six FYs has been 45 percent on average. The gap has been quite significant on the development vote.

- **Lack of Legal Framework for Transition of Tribunals**: The transition of the tribunals to the Judiciary as part of the court system has faced challenges due to lack of a legal framework that provides for standardised procedure for appointment of chairpersons, members, and staff as well as funding of their operations. The Tribunals Bill prepared to address some of these challenges is still pending at the Office of the Attorney General.
- **COVID-19 Pandemic**: Following declaration of COVID-19 pandemic as a pandemic in the country in March 2020 and subsequent scale down of Judiciary operations to curb the spread of the disease. Over the period, presentation of prisoners and remandees to most court stations was restricted. Courts were tasked to undertake decongestion of holding and detention facilities. Concomitantly, all foreign travel, conferences, workshops, colloquia, and training programmes were minimised. Judiciary operations are being upscaled though not yet to the pre-pandemic level.
- **Non-Compliance with the Court's Decisions and Orders:** There have been incidents where high ranking Government officials disregard Court Orders. This undermines judicial authority and rule of law which further erodes public confidence in Courts. Further, there have been attempts to influence the judicial independence of Courts. This is attributable to the fact that the Judiciary has not fully achieved its operational and financial independence yet.
- **The General Elections in 2022:** The post-election period will present a challenge of increasing election related offences and petitions. As part of its preparedness, the Judiciary through the Judiciary Committee on Election ensured on, inter alia, review of rules of procedure, capacity building programmes and facilitation of courts on election dispute resolution matters.
- **New Legal Frontiers:** Disputes arising from the discovery and utilisation of natural resources, data protection, social media, financial crimes, cyber-crimes, human trafficking, human organ trade, terrorism, international organised crime, doping in sports, constitutional and global changes in the legal environment, ethics and governance, socio-economic rights, among many others have continued to be a challenge. To address these challenges, the Judiciary needs to invest and provide opportunities for training and research in-order to build the capacity of the Judges, Judicial Officers, and Staff in resolution of disputes in those areas.
- **Slow Adoption of Automation:** The Judiciary has made significant steps in automation but continues to be hampered by inadequate funding which has affected ICT infrastructure and capacity building. The situation has been compounded by the fact that other stakeholders in the justice chain whom the Judiciary relies upon to discharge its mandate have not achieved comparable levels of automation.

Lessons Learnt

- During the COVID-19 pandemic, the Judiciary was able to capitalise on emerging technological and innovative trends to enhance the integration and automation of court procedures and practices. The Judiciary should continue to use technology to expedite court proceedings by implementing the court recording and transcription system and installing video-conferencing systems in each courtroom.
- To ensure the timely and successful completion of projects, comprehensive financial planning is essential. The funding source for the project and a cash flow forecast for the duration of the project should be determined at the outset. This is necessary to eliminate instances of projects being halted or delayed due to inconsistent cash flow.
- The inadequate budgetary allocation to the Judiciary relative to the overall budgetary needs necessitates a robust strategy for resource mobilisation to supplement subventions from the exchequer. Furthermore, uncoordinated donor support leads to the concentration of resources on the most viable or quick-win projects, while multiple fundings of similar activities may result in waste.
- Implementation of major projects is contingent on the completion of exhaustive feasibility studies to ensure that resources are committed to viable, cost-effective projects.

Recommendations

- Increase the allocation of resources to the Judiciary to facilitate the recruitment of the necessary human resources at all levels, the expansion and completion of court infrastructure, the digitisation of court processes and the automation of registry operations, and the implementation of court programmes such as mobile courts, ADR and AJS.
- Fast-track legislation of the Tribunals Bill, 2015, to create a legal framework for transitioning and managing the tribunals.
- Finalise the operationalisation of the Judiciary Fund to improve financial autonomy of the institution as envisaged in the Constitution.
- Leverage technology to accelerate court proceedings by operationalising the court recording and transcription system as well as installing video-conferencing systems in all courtrooms.
- Enhance digitisation in delivery of public services.

6.2.6. Strengthening the Criminal Justice System

Objective: To strengthen the criminal justice system by ensuring independent institutions have clear mandates and formal collaboration mechanisms exist amongst the relevant institutions.

Implementing Agencies: State Department for Correctional Services; Office of the Attorney General and Department of Justice, ODPP, NPS, Judiciary, Kenya Prisons Service.

Project Progress: During the year under review, the ODPP overall caseload stood at 318,415. This was a 33.33 percent (159,157) decline in caseload compared to 477,572 matters handled in 2020/21. The conviction rate dropped by 1.97 percent from 93.31 percent in 2020/21 to 91.34 percent in 2021/22. The appeals and miscellaneous application success rate increased by 8.91 percent, from 49.1 percent in 2020/21 to 58.01 percent in 2021/22 period. A total of 11,567 cases were resolved through diversion and 3,391 were resolved through plea bargaining agreements. There was a notable improvement in the implementation of these two strategies during the 2021/22 period compared to 2020/21. Cases diverted increased by 366.9 percent (7,998) from 2,180 cases in 2020/21 to 10,178 cases in 2021/22. The cases resolved through plea bargaining went up by 99.24 percent (1,689) from 1,702 cases in 2020/21 to 3,391 in 2021/22. The increase is attributed to the enhanced sensitisation programmes on alternatives to prosecutions conducted countrywide during the period under review.

The ODPP developed the following policies and procedures geared towards equipping prosecutors with the requisite tools to strengthen service delivery and enhance access to justice: the ODPP Compendium on Electoral Justice; Inter-Agency Guidelines on Cooperation and Collaboration in the Investigation and Prosecution of Terrorism and Terrorism Financing; Rapid Reference Guide for the Prosecution of Sexual and Gender Based Violence; Rapid Reference Guide for the Prosecution of Offences under the Prevention of Torture Act; Police Accountability Case Digest; and Thought and Servant Leadership Framework. The Office operationalised the Prosecution Training Institute to train and better equip prosecutors and other criminal justice sector actors. Further, an e-library was set-up which is a comprehensive online research tool that allows prosecutors to keep pace with emerging and complex crimes and facilitate a research-oriented approach that the Office has adopted in its operations.

During the period under review, the State Department for Correction Services spearheaded legal reforms that focused on increasing access to justice for offenders and administration of justice. Not all people committed to prison upon conviction were incarcerated, 46,504 offenders are sentenced to serve probation, Community Service Orders and aftercare. Further, the courts and penal organs made referrals for Social Inquiry Reports to Probation and After Care Services at pre-trial, sentencing and post sentencing stages to assist in decision making in the administration of justice. At the end of FY 2021/22, the courts made 66,086 referrals for generation and presentation of social inquiry reports, the reports were prepared and submitted to courts and other penal institutions. The State Department in liaison with ODPP and Judiciary conducted a decongestion exercise and women, elderly prisoners were released on bail and bond.

In addition, the State Department initiated the review of the Prisons Act and Borstal Institutions Act. Offenders were also facilitated to attend virtual courts hence reducing case backlog and expenses incurred on fuel for transport and minimise risk exposure during transfer of inmates to court.

Implementation Challenges

- Inadequate funding.
- Inadequate human resource capacity. The ODPP currently has 1,307 employees, which is below the current optimum establishment of 2,276.
- Inaccessibility of mobile court stations. ODPP staff must constantly travel to remote areas to provide services for the citizenry.
- Inadequate infrastructural and operational capacity. Expanding the ODPP's processes and procedures has been limited due to inadequate infrastructural capacity, including ICT, and limited office space.
- Weak inter-agency collaboration which has resulted in inefficient and uncoordinated delivery of justice.
- Intimidation of witnesses and victims especially in high profile cases.
- Limited capacity to prosecute complex and emerging crimes. The ODPP also has a shortage of prosecutors with specialised skills to effectively handle

the increasing number of complex cases, especially in transnational crimes.

- Congestion in prisons causes overcrowding and over-stretching the prison facilities.

Recommendations

- Request for increased budgetary allocation from the National Treasury and operationalisation of the Prosecution Fund. Additionally, the ODPP aims to deepen its partnerships with development partners to facilitate additional funding to support projects and activities.
- Cater for the facilitation of staff on mobile court attendance through enhanced funding and budgetary allocation. Additionally, the Office should make suitable arrangements with NPS to provide security for staff when travelling to areas with insecurity.
- The judiciary should consider imposing reasonable bail/bond terms for petty offenders. The judiciary should also consider issuing non-custodial sentences to petty offenders.
- There is a need to pursue multi-agency forums for collaboration and development of robust cooperation mechanisms, through signing MoUs with key partners as well as implementing the ODPP stakeholder engagement strategy.
- The Office needs to continue sensitising witnesses and victims on protection mechanisms and strengthen ties with the Witness Protection Agency to enhance protection of victims and witnesses.
- Enhance collaboration with development partners to provide specialised training in complex and emerging crimes for effective prosecution services.
- Use of experts in various fields such as financial analysts, forensic experts and procurement experts among others.
- Appoint special prosecutors to provide expertise in complex cases.
- Engage with the investigation agencies in joint analysis of current and emerging trends in economic crimes and anti-corruption as well as adoption of measures to combat the commission of offences.


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