The KENYA INSTITUTE for PUBLIC POLICY RESEARCH and ANALYSIS

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KENYA INSTITUTE FOR PUBLIC POLICY RESEARCH AND ANALYSIS
(KIPPRA)

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Thinking Policy Together

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Abbreviations and Acronyms

ADPs	Annual Development Plans
AFA	Agriculture and Food Authority
AI	Artificial Insemination
CIDC	Constituency Industrial Development Centres
CIDPs	County Integrated Development Plans
DSA	Drug and Substance Abuse
FAO	Food and Agriculture Organization
GBV	Gender Based Violence
GCP	Gross County Product
GDP	Gross Domestic Product
HA	Hectares
ICTs	Information Communication Technologies
ICU	Intensive Care Unit
KCB	Kenya Commercial Bank
KDHS	Kenya Demographic Household Survey
KNBS	Kenya National Bureau of Statistics
KNOCS	Kenya National Occupational Classification Standard
LREB	Lake Region Economic Bloc
LVSR	Low Volume Sealed Roads
M.I.C.E	Meetings Incentives Conferences and Exhibitions
MSMEs	Micro Small and Medium Enterprises
MT	Metric Tonnes
MTPs	Medium Term Plans
NGOs	Non-Governmental Organizations
OSR	Own Source Revenue
PFM	Public Finance Management
PPEs	Personal Protective Equipment
RAI	Rural Access Index
SDGs	Sustainable Development Goals
TVET	Technical and Vocational Educational and Training
UNICEF	United Nations International Children's Emergency Fund
UN	United Nations
WASH	Water Sanitation and Hygiene

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Executive Summary

Fiscal Policy

Nairobi County total revenue has significantly grown by 80 percent from Ksh 20.11 billion in 2013/14 to Ksh 36.16 billion in 2018/19, the highest ever. However, the total revenues declined in 2019/20 and 2020/21 to Ksh 23.24 billion and Ksh 30.34 billion respectively, following the adverse effects of COVID-19 pandemic that affected revenue streams. Analysis of the sources of revenue indicate that equitable share from the National Government and OSR have been the main sources of county funding. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA), and Sweden. Development spending related to pending bills have been greater than those related to recurrent expenditure on average accounting for 61.0 per cent of the pending bills portfolio. To ensure continued recovery, the county must now move quickly to tackle the problem of pending bills, mobilize more finances from OSR to increase the available revenues for budgetary operations, seek for more funding in form of grants from development partners to cater for the critical development projects in the county and ensure that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers. In addition to this, the Nairobi County will mobilize more finances from OSR to increase the available revenues for budgetary operations and seek for more funding in form of grants from development partners to cater for the critical development projects in the county.

Agriculture, Livestock and Fisheries

The Agriculture and Livestock sector accounts for a very minimal share of economic activity in Nairobi County. Key agricultural value chain commodities in the County include: - maize, kales, beans bulb onion, corriander, leeks, tomato, kales, spinach, banana, avocado, mango, pawpaw, poultry, goats, dairy cattle, sheep and pig farming. Among the socioeconomic effects on the COVID 19 pandemic on the agri-food sector in the County included negative effects on hours worked by in agriculture related occupations. An additional effect was a slow down on trade and marketing activities due to the restrictions on movements leading to price shocks and shortages of food items. Agricultural productivity in the County is also affected by: - variable and extreme weather events; low agro-processing and value addition opportunities; dependence of rain fed agriculture; low access to quality and affordable inputs; low commercialization and marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services; pests and livestock diseases; and farm losses and post-harvest waste. To successfully build resilience and enhance growth of the agriculture sector, the County will: explore partnerships to develop agro-processing and value addition capacities at the County; link farmers to diverse product markets; strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural inputs and services and build their technical capacity to act on information obtained; provision of storage and cooling facilities; natural resource management; and strengthen agricultural cooperatives to enhance marketing.

Water Sanitation and Hygiene (WASH)

Clean water, proper sanitation and good hygiene remains an essential component in protecting human health in times of outbreak of infectious diseases. Frequent and correct hand hygiene has been emphasized by World Health Organization (WHO) as one of the frontline measures to curb transmission of Covid-19. This has placed a higher demand for water use in households, schools, health care facilities, marketplaces, workplaces, and public places. This therefore has necessitated the need for provision of water, sanitation, and hygiene by national and county governments to all. The county government is faced challenges in revenue collections due to COVID-19 has resulted into reduced incomes among households and businesses, thus deferring collection of revenue from the water services it provides as well as financial support to water services providers. This in the long run could affect the development of the water and sanitation sector. Additionally, COVID-19 poses health challenges to water and sanitation officers if they get infected, they have to be self-isolated, and this may lead to disruption of services. Other constraints to the sector include, drought, water leakages and destruction of water catchment areas. To ensure continuous availability of water, the national and county government to increase water supply in households, institutions, and public places through drilling of boreholes in all the sub-counties. Partner with private sector, donor agencies, local communities, and NGOs to help develop water infrastructure.

Manufacturing, Trade and MSMEs

The momentum in manufacturing, trade and MSMEs was disrupted by the COVID-19 pandemic as the containment measures associated with COVID-19 pandemic took a heavy toll on the sector. The measures that were taken, such as closure of markets, observance of health protocols in form of social distancing and handwashing served to increase the cost of production and affected access to markets for the produce. In sustaining growth in the Manufacturing, Trade and MSMEs sector, the County will: Promote the County City as an economic, industrial and diplomatic hub as planned in the third Medium Term Plan; Collaborate and partner with the counties forming the Nairobi Metropolitan Region, that is, Kiambu, Murang'a, Machakos and Kajiado counties, to enhance economies of scale and market for industrial products; Invest in water projects, expand the roads and transport network to decongest the city and build adequate and affordable housing; Facilitate local and foreign private investors to invest in the Special economic Zones (SEZs); Improve power supply reliability as outlined in the MTP III, for example though investment in cheaper renewable energy; Enhance security through continuous installation of National Security Communication Network and the Surveillance System in the City, which is a Vision 2030 flagship project; and Fast-track construction of KIRDI Research, Technology and Innovation Laboratory in South B, which is supposed to support manufacturing as per MTP III.

Infrastructure, housing and urban development

The main means of transport used in the County is PSV matatus at 58.74 per cent, followed by walking. The paved County road network covers 1155.15 km, while the paved National roads cover 599.9 km. Out of the total paved road network of 1755.05 km, 30.82 per cent is in good condition, 43.77 per cent in fair condition and 22.54 per cent in poor condition. The status of ICT access and use in the county is low, especially among households. The perception that individuals do not need to use the internet, the high cost of services, access to internet elsewhere than home and lack of knowledge and skills on internet are the leading reasons that the people of in the County do not have internet connection. The housing tenure is predominantly owner occupied at 9.3 per cent, with 90.6 per cent of the households under rental tenure. Majority of the households (75.6 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 3.9 per cent reporting a partial waiver, despite inability to pay due to the pandemic. In addressing the prevailing challenges, the county will develop a public transport master plan in collaboration with the Nairobi Area Metropolitan Authority (NAMATA) and Nairobi Metropolitan Services (NMS) office for integrated multi-modal transport systems; enhance internet connectivity to public buildings and key trade centres to boost e-commerce especially for MSMEs in trade and business; and Develop a policy to promote home ownership to address the problem of rent distress during times of emergency and create a fund to cushion landlords and tenants from rent distress during periods of emergency.

Tourism

Nairobi City County is a major centre of tourism in the region. Its relative proximity to many tourist attractions areas both in Kenya and East Africa makes it an asset of great importance in the tourism sector. Nairobi City County has several world class hotels and restaurants together with excellent Meetings, Exhibitions, Conferences and Exhibitions (M.I.C.E) facilities. There exist eight 5-star hotels and eight 4-star hotels with a combined bed capacity of 5,700 beds, five 3-star hotels, six 2-star hotels and 122 unclassified hotels. It is also home to the largest ice-skating rink in East Africa at the Panari Hotel's Sky Centre covering 15,000 square feet and accommodating 200 people. Bed occupancy within the high-class hotels within the County has been growing at an average rate of 9.7 per cent with the occupancy averaging 90.0 per cent. Accommodation and food services contribute 1.3 per cent to total GCP. The following strategies are proposed for re-engineering of tourism sector in the county: Promote domestic tourism to cushion the sector from global shocks such as pandemics and other disruption to international travel; Diversification and marketing of tourist product offering; come up with the Nairobi annual cultural festival; Improvement of hygiene standards in the tourist hotels and attraction sites; improvement on the sanitation aspects especially during the COVID-19 era whereby tourists will be seeking for touristic experiences that assure them of health and safety; Refurbishment of other tourist accommodation facilities to achieve star-rating requirements; Enforcement of existing laws regarding pollution and natural resource management; promote usage of 'green' energy such as solar power in tourism establishments and; Enhanced energy and ICT infrastructure development; establishment of county tourism online information portal.

Health

In 2019/2020, the number of health facilities in the county were 1,118 which comprised of 1,014 primary health facilities and 4 hospitals. This was an improvement from a total of 868 health facilities in the previous year, 2018. The number of beds per 10,000 population is 143 against the WHO recommendation of 30 beds per 10,000 population. In general, 40.7 per cent of the county population had some form of health insurance cover. The National Hospital Insurance Fund (NHIF) was the leading health insurance provider reported by 96.3 per cent of the population. Employer contributory insurance cover was reported by 12.9 per cent of the population. The county had 28.6 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 10.4 per cent were fully immunized against measles at 18 months. COVID-19 has worsened the situation as far as youths and women are concerned. These are the groups have been faced several challenges even before the outbreak of the COVID-19. FGM and Gender based violence cases have increased with the lockdown. Youths who are entrepreneurs have also been affected losing jobs and businesses due to the lockdown. In line with the health status in the county, some of the recommendations that need attention include the following: The county to create awareness on availability and importance of free maternity services and address other constraints to access of maternal health services in the county to address risk of contracting COVID-19 in event of visiting any health facility; To reduce high burden of both communicable and non-communicable disease, the county to revamp its Community Health Strategy. This is a community based promotive and preventive health services. To make this more effective, the County to engage Community Health Volunteers (CHVs) and equip them with the relevant resources and skills.

Education training

About 96.6 per cent of public primary schools in Nairobi County have been installed with ICT infrastructure and devices under the Digital Literacy Programme (DLP). The Gross Attendance Rate (GAR) for pre-primary school was 80.8 per cent while that of primary school and secondary school was 101.3 and 88.4 per cent respectively in 2015/16. Just like other counties, many people in Nairobi County lost their jobs because of the COVID-19 pandemic. Private schools were forced to lay off both teaching and support (casuals) staff because they could not sustain their salaries. Public schools have also faced challenges in making payment for the other expenses such as electricity, water, and security bills. The entire county is not fully networked hence limited access to the e-learning programme for the larger portion of school children at home. Although almost all schools had access to the digital literacy programme, only 42.1 per cent of households had access to internet. Another challenge is the inability of the private schools to sustain their teachers while they are not in operation. The county will prioritize projects that improve school water, sanitation and hygiene facilities and management in order to reduce future effect of similar or related outbreak while promoting public health in learning institutions, promote remedial/catch up lessons for learners who might have lagged behind also schools to utilize ICT platforms and have a depository of teaching and learning materials that learners could use at their own time and while at home, provide financial or in-kind support, such as school feeding, to help families overcome the increased costs of attending school, also provide psychosocial support to teachers and learners and fight drug and substance abuse among the youths in the county. This can be done through counselling and ensuring that they are not idle especially this period when learning institutions are locked.

Social Protection

The overall poverty rates in the county stand at 47 per cent which is higher than the national average of 36.1 per cent. The county's food poverty levels are at 23 per cent and 25 per cent of the total population is multidimensionally poor. Severe shocks have had negative impact to the household's economic and social welfare of county residents. The social and economic effects of the COVID-19 pandemic increased households' susceptibility to Gender Based Violence (GBV) in the county. Loss of jobs and business opportunities led to an increase in poverty and declining of people welfare. Households in the county received various forms of social assistance or transfers or gift either in form of a good, service, financial asset, or other asset by an individual, household or institution. Households in the county received various forms of social assistance or transfers or gift either in form of a good, service, financial asset, or other asset by an individual, household or institution. Transfers constitute income that the household receives without working for it and augments household income by improving its welfare. Cash transfers include assistance in form of currency or transferable deposits such as cheque and money orders. COVID-19 exposed lack of preparedness among counties in terms of responding to the emergencies such as COVID-19 pandemic. It provided an opportunity to measure how county governments are prepared to handle the devolved functions. COVID-19 pandemic created effects with immediate and long-term economic consequences for children, PWDs, elderly and their families. To strengthen social protection response in face of a similar pandemic, the Nairobi County government to conduct mass civic education among the people on COVID-19 prevention measures, how to handle an infected person and avoidance of stigmatization of the affected person, enrol more county residents in welfare programmes such as NHIF which will ensure that they access medical treatment in case of falling sick and give tax exemption for the SMES who have suffered losses in their business as result of diseases outbreak.

Labour participation

The main economic activities include livestock farming, fruit farming, sand harvesting, mining and trade. Loss of employment and closing of businesses due to COVID-19 had far reaching consequences to county residents. This has affected people source of income hence increasing poverty among the residents. With the loss of jobs in the Small and Medium Enterprises the livelihood of people working in these sectors were directly or indirectly affected, particularly youths as the sector employs most of the young population. During the pandemic, about 1.0 per cent of workers in the county were casual workers 48.1 per cent were regular workers (full time), 5.9 per cent employees were working as part time. However, about 36.0 per cent reported decrease in income while only 0.3 per cent of people reported to have experienced increased income. These could be the people working in the health sector who are supplying medical equipment such as masks and PPEs. The Nairobi County government to promote implementation of a stronger labour market interventions and policy reforms that drive employment creation. The County shall deepen technical education, training and skills development; and invest in livestock sector in the County, promote investment and entrepreneurship through provision of loans, the county Government to improve access to finance for small and medium enterprises through lending institutions and formulate measures aimed at encouraging employment creation through corporate social responsibility (CSR), including expanding the national internship programs and promoting Information Technology (IT) enabled jobs.

Introduction and Structure of Nairobi County Economy

1.1 Introduction

Nairobi City County is the capital city of Kenya with an estimated population of 4,397,073 people, of which 49.8 per cent are male and 50.1 per cent female (KNBS, 2019) as indicated in Table 1. The county occupies a land area of 696.1 mm^2. Of the population, 42,703 (1.1%) are persons with disabilities. The youth constituted 45.3 per cent of the population of whom 53.0 per cent were female. The county has a population density of 6,247 per km^2. The elderly population (65 years and above) is made up of 1.3 per cent of the total population of whom 49.1 per cent were female. The population in school-going age group (4-22 years) was 35.6 per cent in 2019.

In 2015/2016, the overall poverty rate in Nairobi County was 17.0 cent against the national poverty rate of 36.1 per cent. In addition, 16.3 per cent of the population were living in food poverty and 15.2 per cent were living in multidimensional poverty; that means being deprived in several dimensions including health care, nutrition, and adequate food, drinking water, sanitation and hygiene, education, knowledge of health and nutrition, housing and standard of living, and access to information. According to the Kenya Demographic and Health Survey (KDHS) 2014, 23.0 per cent of the children were stunted compared to the average national level at 26.0 per cent.

Table 1.1: Development indicators in Nairobi County

	County	National
Estimated County Population (KNBS, 2019)	4,397,073	9.2% of total population
• Males	2,192,452	49.8%
• Females	2,204,376	50.1%
• Intersex	245	0.006%
Estimated population density (km^2)	6,247	82
Persons with disability	1.1%	2.2%
Population living in rural areas (%)	0.0%	68.8%
Children (0-14 years) (%)	31.4%	41.1%

School-going age (4-22 years) (%)	35.6%	68.7%
Youth 15-34 years (%)	45.3%	36.1%
Labour force (15-64 years) (%)	67.4%	55.0%
Elderly population (over 65-year-old)	1.3%	3.9%
Number of COVID-19 cases (as of 11th September 2020) (Ministry of Health); National cases were 35,232 people	18,968	56.7% of the national cases
Poverty (2015/2016) (%)	17.0%	36.1%
Food poverty (2015/2016) (%)	16.3%	31.9%
Multidimensional poverty (2015/2016) (%)	15.2%	56.1%
Stunted children (KDHS 2014)	23.0%	26%
Gross County Product (Ksh million) 2020	2,669,829	27.5 per cent Share to total GDP
Average growth of nominal GCP (2013-2020) (%)	14.4%	104.8%

Data Source: KNBS (2019)

The age distribution of the county residents as per the 2019 Housing and Population Census is shown in Table 1.2. The bulk of the county's population is in the age group of 15-34 years, comprising of 1,984,954 individuals. They are followed by persons aged 6-13 years who are the primary school children comprising of 651,284 of the county population. The under 0-3 age comprise of 430,916 of the county population. This shows that the county has a general youthful population.

Table 1.2: Population distribution for selected age groups in the County (2019)

Age group	Male	Female	Total
Under 0-3	216,917	213,999	430,916
Pre-primary school age (Under 4-5)	92,385	91,600	183,985
Primary school age (6 -13)	321,007	330,277	651,284
Secondary school age (14-17)	127,768	144,636	272,404
Youth population (15-34)	937,327	1,047,627	1,984,954
Female reproductive age (15-49)		1,399,719	1,399,719
Labour force (15-64)	1494982	1498396	1,498,396
Aged population 65+	29,575	28,547	58,122

Data Source: KNBS (2019)

1.2 Level of Socio-economic Deprivations

In 2015/2016, 40.7 per cent of the population had health insurance cover, 46.5 per cent lived in premises with water, 8.1 per cent lived in their own homes and 85.8 per cent had access to mobile telephone (Table 1.3) and majority of the households (99.3s%) had access to toilet facility. As a result, the multi-dimensional poverty is estimated at 15.2 per cent.

Table 1.3: Level of deprivations for the various indicators for multidimensional poverty in the county

Indicator	Details	Percentage Distribution (%)
Health care	Population with health insurance cover	40.7
Drinking water (time taken to fetch)	Zero (in premises)	46.5
	less than 30 minutes	50.9
	30 minutes or longer	0.4
Sanitation and hygiene	Proportion of households with toilet facility	99.3
	Shared toilet	68.8
	Not shared	31.2
	Place to wash hands outside toilet facility	43.6
	No place to wash hands outside toilet facility	55.6
Education (population 3 years and above by school attendance status)	Ever attended	97.5
	Never attended	1.8
Knowledge of health and nutrition (children aged 0-59 months that participated in community nutrition programmes)	Participated in community nutrition programmes	52.2
	Did not participate in community nutrition programmes	46.8

Housing and standard of living (house ownership)	Owner occupier	8.1
	Pays rent/lease	86.4
Access to information (population aged 3 years and above by ICT equipment and services used)	Television	88
	Radio	89.1
	Mobile phone	85.8
	Computer	29
	Internet	43.8

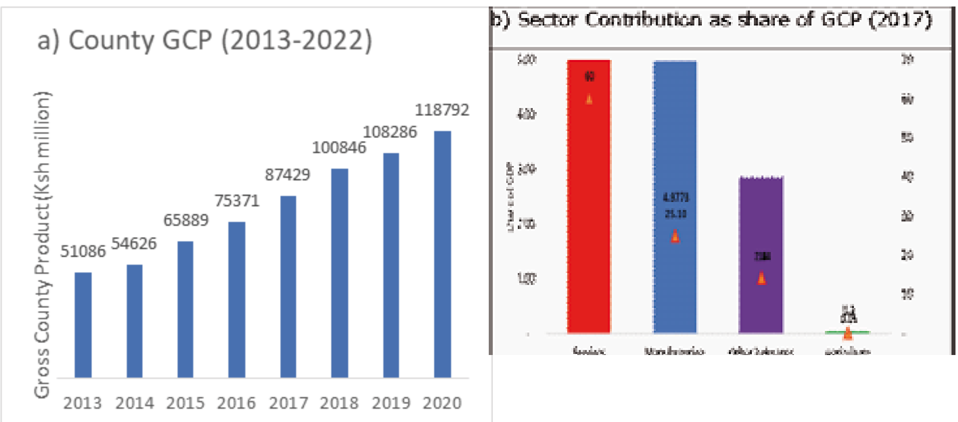
Data Source: KIHBS 2015/16

1.3 Structure of Nairobi County Economy

Nairobi County Gross County Product (GCP) accounted for 14.4 per cent of total Gross Domestic Product (GDP) between 2013 and 2020 (Figure 1). The GCP increased from Ksh 1,328,511 million in 2013 to Ksh 2,669,829 million in 2020, representing an average annual growth rate of 14.4 per cent.

The services sector includes such activities as wholesale and retail trade while industries and manufacturing include large scale industries and processing of consumer goods producers (plastic, furniture, batteries, textiles, soap, cigarettes, and flour), agricultural products processing, oil refining, and cement, and various manufactured goods for export.

Figure 1.1: Structure of the county economy, 2020



Data Source: KNBS (2019)

1.4 COVID-19 Caseload and Implications of Mobility Restrictions

As of March 2020, Nairobi County had zero cases. However, by August 2020, the County had reported 6,775 COVID-19 cases with mobility stringency of 70.4. The caseload would rise to 70,908 by August 2021, with mobility stringency of 56.0. The mobility stringency index is a composite measure rescaled to a value from 0 to 100 (100=strictest) based on nine response mobility indicators. The nine metrics used to calculate the mobility stringency index are: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closure of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movements and international travel controls. An index measure closer to one hundred means high incidence or severity of mobility restrictions. The County mobility stringency index implies the severity of the restrictions was moderate.

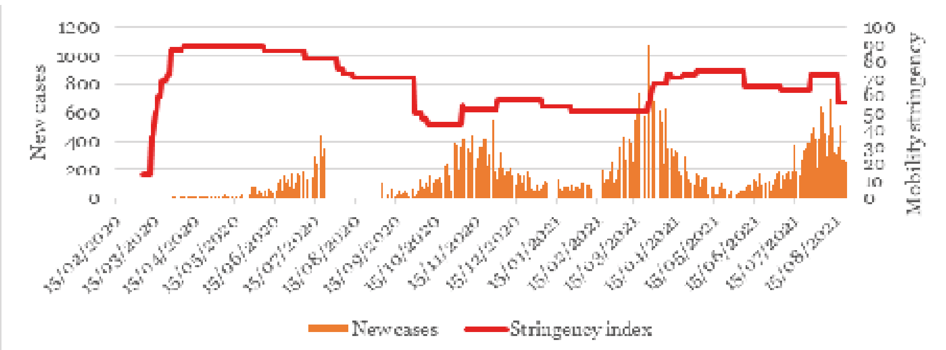
Table 1.4: COVID-19 cases in Nairobi County and the country's mobility stringency

Date	Total cases	Mobility stringency (0-100)
13th March 2020	1	36.1
23rd August 2020	6,775	70.4
23rd August 2021	70,908	56.0

Data Source: Oxford University

New COVID-19 cases in Nairobi County were highest from May 2020-July 2020, October 2020-December 2020, March 2021-May 2021, and July 2021-August 2021. During the four time-periods, spikes in new cases in the County were preceded by relaxation of COVID-19 mobility restrictions. Reduction in the County's new cases was similarly preceded by tightening of mobility restrictions.

Figure 1.2: COVID-19 cases in Nairobi County and the country's mobility stringency

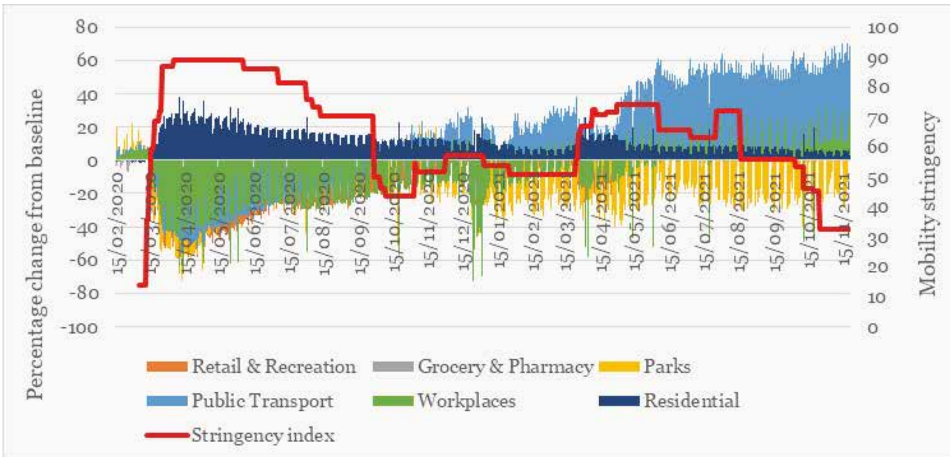


Data Source: Oxford University

Demand for residential space and public transport have remained resilient throughout the COVID-19 period. Demand for parks has, however, under-performed in the County even when mobility restrictions were least stringent. With vacation of mobility restrictions in October 2021, demand for public transport and workspaces has been strong.

Figure 1.3: Effect of COVID 19 in Nairobi County economic performance and the national mobility stringency

Data Source: Oxford University



The broad objective of the report is to analyze the socio-economic effects of COVID-19 across sectors and propose interventions for mitigating the effects. The report is organized as follows. Chapter 2 focuses on fiscal policy; chapter 3 focuses on agriculture, livestock and fisheries; chapter 4 focuses on water sanitation and hygiene; chapter 5 focuses on manufacturing, trade and MSEs; chapter 6 focuses on transport and information and communication technology; chapter 7 focuses on urban development; chapter 8 focuses on tourism, chapter 9 focuses on health; chapter 10 focuses on education and training; chapter 11 focuses on social protection; chapter 12 focuses on labour participation and chapter 13 concludes the report.

2. Socio-economic Effect of COVID-19

2.1 Fiscal Policy

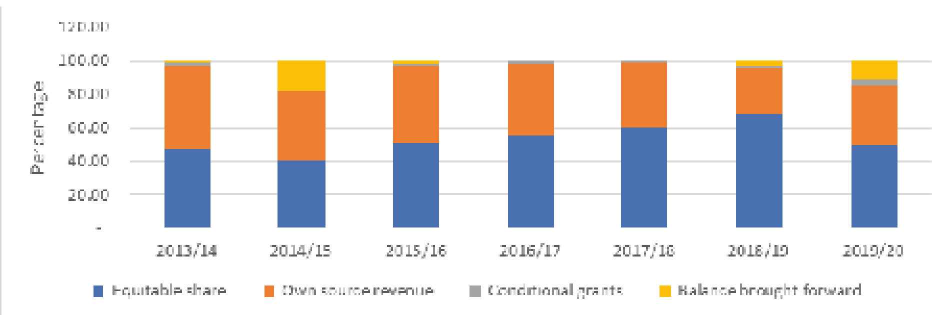
County revenues are critical in financing the recurrent and development expenditures. Timely and adequate funding aid counties in implementing projects. The County's main revenue sources comprise of the transfers from the National Government, Conditional Grants, and Own Source Revenue (OSR).

Transfers from National Government

Nairobi County total revenue has significantly grown by 80 per cent from Ksh 20.11 billion in 2013/14 to Ksh 36.16 billion in 2018/19, the highest ever. However, the total revenues declined in 2019/20 and 2020/21 to Ksh 23.24 billion and Ksh 30.34 billion, respectively, following the adverse effects of COVID-19 pandemic that affected revenue streams. The amount realized in 2020/21 was 80.4 per cent of the annual budget allocation of Ksh 37.88 billion, an improvement from 63.4 per cent attained in 2019/20. The improvement was supported by the one hundred per cent disbursement of equitable shares and increase in conditional grants from the National Government.

Analysis of the sources of revenue indicate that equitable share from the National Government and OSR have been the main sources of county funding (Figure 2.1). Equitable share from the National Government contributed an averaged 54.26 per cent of the total revenue between 2013/14 to 2020/21. Additionally, it increased by 104.3 per cent from Ksh 9.51 billion in 2013/14 to Ksh 9.42 billion in 2020/21, underscoring its importance in financing County operations. The amount received in 2020/21 accounted for one hundred per cent of the annual budget allocation. This implied that the County received all expected amount from the National Government to finance its operations, accentuating its commitment to support county operations through timely financing.

Figure 2.1: Share of county revenues by source



Data Source: Office of the Controller of Budget (Various reports)

Monthly cash transfers from the National Government have had an increasing trend from January to June over the years as shown in Table 2.1. A similar trend was observed in 2020 with the transfers growing by 65 per cent from Ksh 7.14 billion received in January to Ksh 11.74 billion received in June. In comparison to 2019, the total amount transferred to Nairobi County in March, April, May, and June of 2020 decreased by 22 per cent from Ksh 48.03 billion to Ksh. 37.41 billion. To enable the county to undertake its budget operations and curb the spread of COVID-19, it was expected that more funds were transferred in the subsequent months.

Table 2.1: Monthly cash transfers from National Government

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
2021	6,226.39	6,279.40	-	-	-	-	4,812.42	-	-
2020	7,135.32	7,135.32	7,135.32	8,221.21	10,316.36	11,739.99	3,599.60	3,599.60	3,599.60
2019	6,501.44	7,796.03	9,322.30	10,743.78	12,007.32	15,957.82	12,007.32	4,067.25	567,321.77
2018	8,775.02	8,825.29	9,893.45	11,115.63	11,206.20	15,625.68	1,895.30	3,342.60	4,922.02
2017	-	-	10,757.75	11,879.75	12,951.63	14,023.51	5,014.46	-	-
2016	-	-	8,772.71	9,812.44	11,956.88	11,956.88	-	-	-

Data source: Gazette Notice (Various issues)

Conditional grants

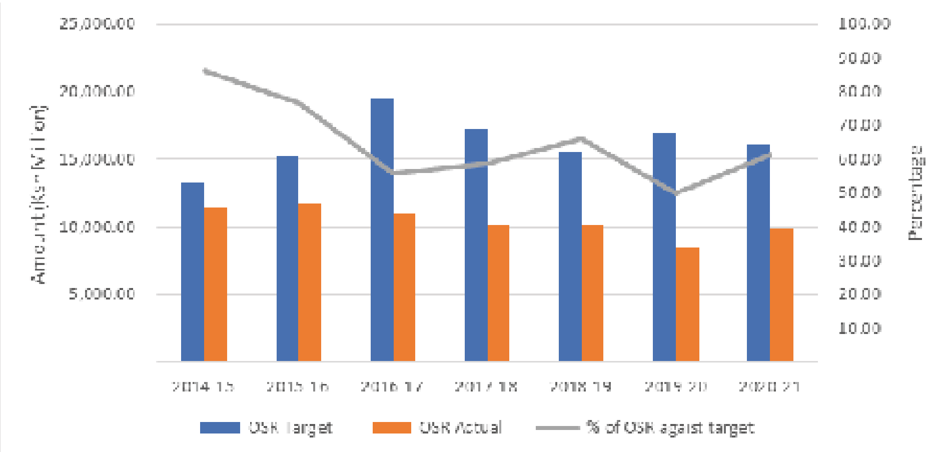
The County receives conditional grants from the National Government and development partners from World Bank and Danish International Development Agency (DANIDA), and Sweden. During 2020/21, Nairobi County received Ksh 195.63 million and Ksh 58.52 million from the National Government and Development partners, respectively. The contribution of condition grants to total revenue has been low. On average, the grants contributed 1.42 per cent of the County total revenue between 2013/14 and 2020/21. In nominal terms, conditional grants decreased by 34.91 per cent from Ksh 390.47 million in 2013/14 to Ksh 254.15 million in 2020/21. To attract more funding inform of grants, the County needs to maintain good relations, and comply fully to the requirements of its development partners.

Own Source Revenue

The County has for some time been deemed as the best performing county on OSR collection. OSR remains a major source of revenue in Nairobi County, contributing an average of 39.56 per cent of the total revenue between 2013/14 and 2020/21 (Figure 2.1). Notably, the County recorded the largest share of OSR to total revenue in 2013/14 and 2015/16 of 49.86 and 45.65 per cent, respectively.

Analysis of annual County OSR performance shows a stable trend over the years, averaging Ksh 10.43 billion between 2014/15 and 2020/21 (Figure 2.2). The performance of actual OSR versus target indicate that the county achieved more than 50 per cent of its target over the period under review, attaining a high of 86.31 per cent of its target in 2014/15 (Figure 2.2). During 2019/20, the County generated Ksh 8.52 billion from OSR, which was 16.9 per cent decrease compared to Ksh 10.25 billion realized during 2018/19. The county was unable to achieve its target due to the COVID-19 pandemic, which negatively affected many businesses that are the main OSR contributors. In addition, most of the hotels and business had been closed affecting the County's revenue generation and collection. With easing of the containment measures, the County generated Ksh 8.53 billion as OSR, an increase of 16.8 per cent compared to the amount realized in 2019/20.

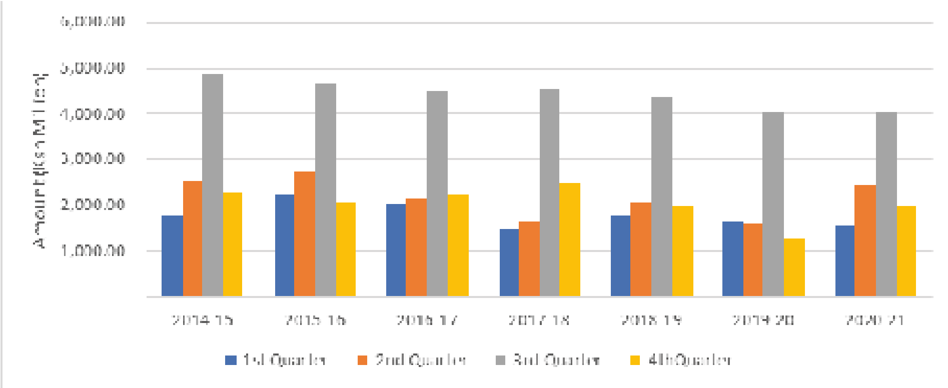
Figure 2.2: Annual own source revenue targets and actual collections



Data Source: Office of the Controller of Budget (Various reports)

The county collects most of its OSR during the third quarter (Figure 2.3). This is due to the timeline of single business payments, which elapse on 31st March of every year. The quarterly collections for 2019/20 were dismal compared to collections of other financial years. The lower collections experienced in corresponding quarters was attributed to the adverse effects of COVID-19 pandemic that led to slow down of economic activities in the county, hampering revenue generation and collection. The measures instituted to curb the spread of the coronavirus, such as curfew hours and the County lock down, significantly affected business operations, which further contributed to decline in OSR generation. During 2020/21, the County registered slight improvements in each quarter compared to 2019/20 as shown in Figure 2.3. The improvements signified recovery in the various sectors of the economy supported by the easing of containment measures across the country. Going forward, the OSR performance is envisaged to rebound to its original performance once the economy recovers fully.

Figure 2.3: Quarterly own source revenue collection



Data Source: Office of the Controller of Budget (Various reports)

County Expenditure Analysis

Economic and political crises, natural disasters (such as droughts and flooding), security challenges and health crisis (such as the COVID-19 pandemic) highlight the consequential risks and underlying vulnerabilities in national and county level budgetary and planning system. These can substantially affect public resources and in cases of weaker planning systems they may impact the nature and level of service delivery to the citizen.

The UN Sustainable Development Goals (SDGs) emphasize the productive role of targeted and strategic county level expenditure. The 2014 UN Secretary General's Synthesis Report on the Sustainable Development Goals (SDGs) states that "many of the investments to achieve the sustainable development goals will take place at the sub-national level and be led by local authorities"[1]. It is at the counties that economic activity takes place and when spending priorities and execution are done just right, then the County and country will be set to the desired development trajectory.

Despite their constrained fiscal autonomy (such as inability to borrow funds) and relatively small budgets, the County government has a key role to play in promoting growth as espoused in the Kenya Constitution. This is particularly the case with development expenditure, which is within the assigned remit of county as per the PFM Act of 2012 and is key to the county's future growth prospects, given several decades of under-investment, which have constrained productive capacity in the local economy.

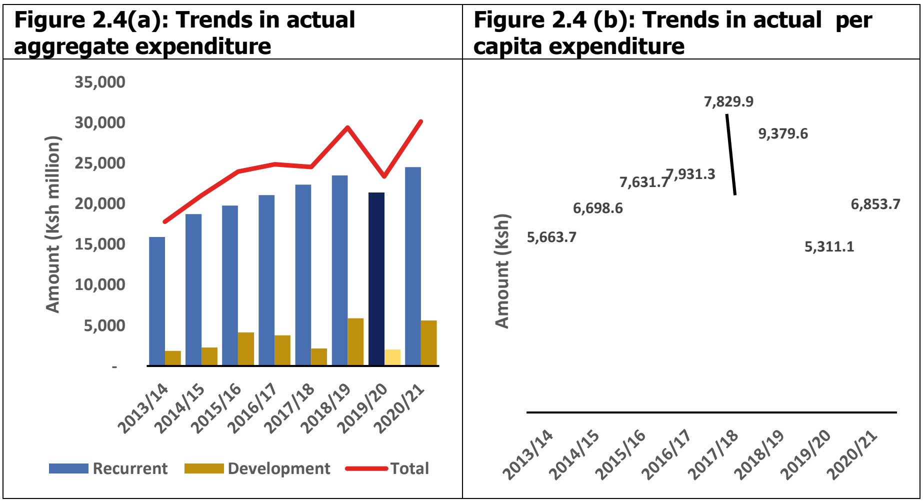
Trends and profile of county government expenditures

County expenditure has over the years been rising as the county escalates its efforts in provision of services to its residents. Total county expenditure has grown significantly since 2013/14. With the implementation of the first full year county budget in 2013/14, actual expenditure in the county increased from Ksh

1 UN General Assembly (2014), p. 22, par. 94.

17,774.9 million to Ksh 29,398.2 million in 2018/19 before dropping to Ksh 23,353.4 million in 2019/20 and then increasing to Ksh 30,136.1 million at the end of 2020/21 (Figure 2.4). Cumulatively, the county has spent Ksh 192.3 billion between 2013/14 and 2020/21. This comprises of a cumulative Ksh 164.5 billion and Ksh 27.8 billion on recurrent and development expenditure, representing 85.5 per cent and 14.5 per cent of the cumulative recurrent and development expenditure, respectively. This signals that more development expenditure is required to support deepening of capital spending in the county.

Figure 2.4: County expenditure analysis



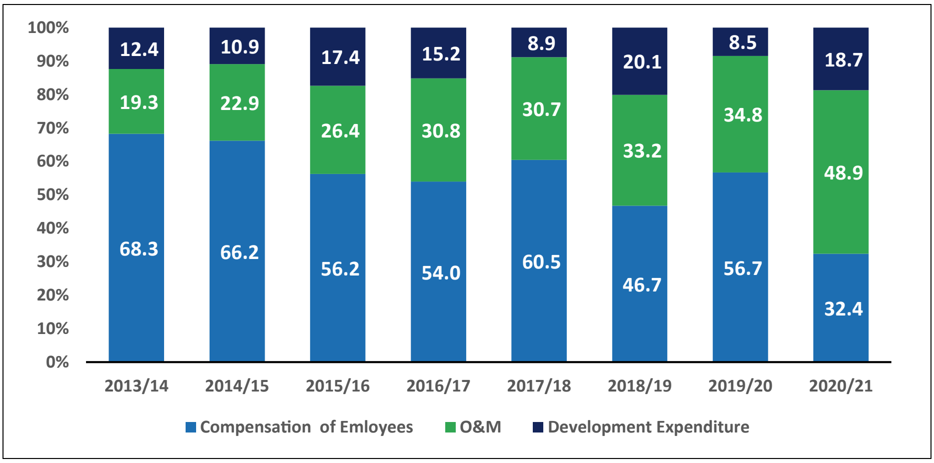
Data Source: Office of the Controller of Budget

Consistent with the nominal growth in actual county expenditure, spending on a per capita basis has shown upward growth over the period. In 2013/14, per capita spending in the county was about Ksh 5,663.7 compared to Ksh 9,3756 in 2018/19 and Ksh 6,853.7 in 2020/21. The average per capita spending between 2013/14 and 2020/21 stood at Ksh 7,162.4.

Utilization of public resources in the county

Analysis of expenditure by economic classification and by department (spending priorities) reveal interesting insights. It is evident that since inception of devolution, the county government prioritized narrowing the economic and social infrastructure gaps. Much of government development expenditure has been dominant in provision of health services, public works, education, agriculture, and trade and industry.

Figure 2.5: County government expenditure by economic classification (% of total county government expenditure



Data Source: Office of the Controller of Budget

County development expenditure accounted for an average of 14.0 per cent of total county spending between 2013/14 and 2020/21 as represented in Figure 2.5. In 2017/18 and 2019/20, the share of development expenditure performed poorly and accounted for just 8.9 per cent and 8.5 per cent of the county expenditure, respectively. Over the review period, Nairobi County development expenditure has not gone beyond 21.0 per cent of its total expenditure. Compensation of employees has been burgeoning between 2013/14 and 2020/21. The average share of compensation of employees in total county budget over the review period was 55.1 per cent. It is only in 2018/19 and to 2020/21, that compensation of employees accounted for less than half of the county total spending.

Reflecting on expenditure by functional classification (priority spending), the County spent a combined average of 52.3 per cent of total expenditure during 2014/15 to 2020/21 on non-administrative services such health and emergency services (17.7%); public works, transport and infrastructure (9.7%); education, youth affairs, sports, culture and social services (6.1%); environment, water, energy, and natural resources (6.4%); Nairobi metropolitan services (5.7%); trade, commerce, tourism, and cooperatives (1.7%); urban planning and lands (1.3%); agriculture, livestock development, fisheries and forestry (1.1%); ICT, E-government and public communication (1.0%), and emergency funds (0.2%).

During the review period, coordination and administrative functions accounted for a combined 47.7 per cent, with Office of the Governor and Deputy Governor leading at 20.3 per cent followed by Finance and Economic Planning at 15.9 per cent, County Assembly at 6.0 per cent, Public Service Management 5.3 per cent, while County Public Service Board accounting for 0.2 per cent.

Table 2.2: County departmental/priority spending

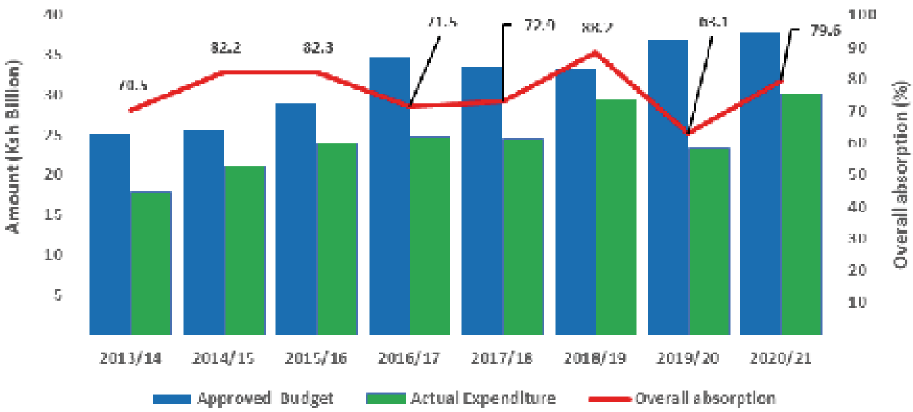
Department	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Average spending	Average spending share (%)
Office of Governor and Deputy Governor	5,349.4	4,574.1	5,193.6	5,161.6	6,431.3	4,770.2	4,488.6	5,138.4	20.29
Health	5,246.7	4,904.9	4,229.9	5,435.1	5,570.2	5,294.4	625.6	4,472.4	17.66
Finance and Economic Planning	2,131.5	3,010.1	3,808.5	3,002.1	4,158.4	5,144.0	7,001.9	4,036.6	15.94
Public Works, Transport and Infrastructure	2,341.9	3,011.3	3,241.1	1,855.8	4,684.9	1,693.6	412.0	2,463.0	9.73
Environment, Water, Energy and Natural Resources,	1,174.8	1,613.6	2,154.2	1,629.2	2,390.6	1,470.1	884.6	1,616.7	6.38
Education, Youth Affairs, Sports, Culture and Social Services	1,319.5	1,755.6	1,647.7	1,537.3	1,857.4	932.5	1,706.4	1,536.6	6.07
County Assembly	1,351.2	1,743.2	1,572.2	1,482.0	1,393.1	1,303.8	1,822.6	1,524.0	6.02
Nairobi Metropolitan Services	-	-	-	-	-	-	10,080.7	1,440.1	5.69
Public Service Management	1,082.2	1,438.3	1,448.3	2,159.8	925.9	1,045.1	1,290.1	1,341.4	5.30
Trade, Commerce, Tourism and Cooperatives	214.8	657.8	372.5	396.4	533.7	402.7	416.5	427.8	1.69
Urban Planning and Lands	322.9	489.1	272.8	343.1	421.4	354.6	146.6	335.8	1.33
Agriculture, Livestock Development, Fisheries and Forestry	272.0	280.2	379.1	313.7	290.4	239.4	229.0	286.3	1.13
ICT, E-Government and Public Communications	162.1	426.1	322.8	244.5	224.0	108.5	257.4	249.3	0.98
Ward Development Programmes	-	-	-	840.0	99.8	214.4	70.1	174.9	0.69
Liquor Licensing Board	-	-	-	-	209.3	222.5	294.3	103.7	0.41
Urban Renewal and Housing	-	-	158.7	94.2	151.3	84.6	14.6	71.9	0.28
Emergency Funds	-	-	-	-	29.7	43.1	300.5	53.3	0.21
County Public Service Board	53.8	46.9	57.4	46.9	26.8	30.1	94.1	50.8	0.20
Total	**21,022.6**	**23,951.0**	**24,858.7**	**24,541.5**	**29,398.1**	**23,353.6**	**30,135.8**	25,323.0	100.00

Data Source: Office of the Controller of Budget

Effectiveness of County spending

Total budget execution averaged 76.3 per cent in 2013/14 to 2020/21. In 2013/14, overall total budget execution stood at 70.5 per cent. This execution improved to 88.2 per cent and 82.3 per cent in 2016/17 and 2015/16, respectively, before taking a dip in 2016/17 then rising to 88.2 per cent in 2019/19 then declining to 63.1 per cent in 2019/20, the lowest absorption recorded since devolution. At the end of 2020/21, budget absorption stood at 79.6 per cent, meaning that in 2020/21, only Ksh. 30.1 billion was utilized out of the approved budget of Ksh 37.9 billion (Figure 2.6).

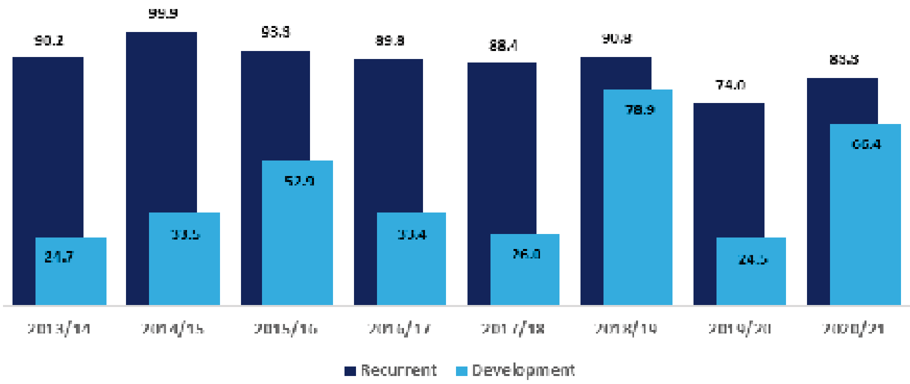
Figure 2.6: County approved expenditure and absorption rates



Data Source: Office of the Controller of Budget

Regarding development budget execution in the county, the average absorption rate between 2013/14 and 2020/21 was 42.5 per cent (implying that on average over 57.0 per cent of the development budget is not absorbed). This implies existence of shortfalls in budget implementation, and the county to continue tightening budget implementation to ensure achievement of greater absorption rates to achieve the targets in Annual Development Plans (ADPs) and the County Integrated Development Plans (CIDPs). On recurrent expenditure, the execution has been robust over the years, the average absorption rate has been 88.7 per cent leaving about 11.3 per cent of unspent recurrent budget.

Figure 2.7: Absorption rates for recurrent and development expenditures (%)

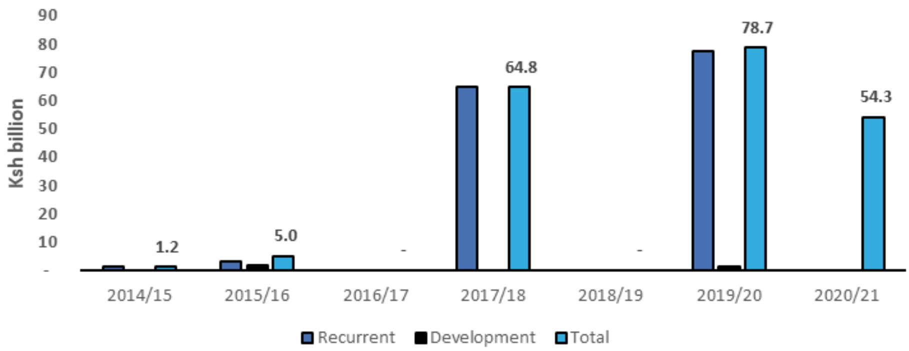


Data Source: Office of the Controller of Budget

Pending Bills

Nairobi County has had issues of not reporting its data on pending bills, especially for 2016/17 and 2018/19 while in 2020/21 only the sum of pending bills was reported without details of what per cent relates to development and recurrent expenditure. Nonetheless, pending bills in the County are dominated by those related to recurrent expenditure, especially repairs and maintenance. Payment of all pending bills in their respective fiscal year enhances the execution of both development and recurrent budget in subsequent years by releasing funds meant for subsequent years.

Figure 2.8: Profile of county pending bills



Data Source: Office of the Controller of Budget

To achieve its overall goal of improving lives and livelihoods of its residents, the County Government must now move quickly to tackle the problem of pending bills. Increasing and persistent pending bills is a threat to the survival of the private sector, particularly primary firms that trade with the County government. These firms are critical for employment creation and driving economic activity within the County. These bills have not only affected their profitability and overall performance but have also become a threat to private sector in general and the families that depend on these firms through ripple effect. If not well monitored, these could grow and eat up on the county's already thin revenue sources.

2.2 Recommendations

(i) Mobilize more finances from OSR to increase the available revenues for budgetary operations.

(ii) Seek for more funding in form of grants from development partners to cater for critical development projects in the county.

(iii) Ensure that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers.

(iv) Ensure the ongoing infrastructure project are completed and suppliers paid within the specified timelines for optimal returns to investment and to spur private sector activity.

(v) Improve budget execution and absorption of development budget by harmonizing project implementation cycles to budgeting and fast-track exchequer releases.

(vi) Reduction of expenditure on compensation of employees within the PFM requirement since ballooning compensation of employees potentially affects execution of key development programmes especially if not brought to sustainable levels.

(vii) Monitoring and prompt payment of pending bills as they limit execution of planned activities in subsequent budgets.

3. Agriculture, Livestock and Fisheries

3.1 Characteristics of the Sector

Agriculture accounts for a very minimal share of economic activity in Nairobi County. Less than one per cent of the County's economic activity is driven by the agriculture sector. In 2017, agriculture accounted for Ksh 4,102 million out of the total Ksh 1,492,323 million Gross County Product (GCP) amounting to 0.3 per cent of the County's GCP.

About 2 per cent of households in Nairobi County practice farming. About 1.09 per cent of the households produce crops, 1.51 per cent produce livestock, 0.02 per cent practice aquaculture and about 0.05 per cent are involved in fishing. About 0.22 per cent of households practice irrigation farming.

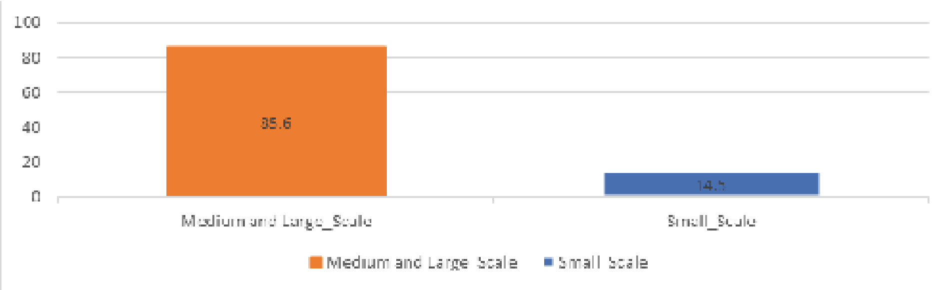
Table 3.1: Distribution of households practicing agriculture, fishing and irrigation by county and sub-county

County/ Sub-County	Total Households	Farming Households	Crop Production	Livestock Production	Aquaculture	Fishing	Irrigation
Kenya	12,143,913	6,354,211	5,555,974	4,729,288	29,325	109,640	369,679
Nairobi	1,506,888	32,258	16,359	22,818	279	697	3,343
Dagoretti	155,089	5,691	3,298	3,818	29	81	577
Embakasi	347,955	3,224	1,361	2,344	36	122	315
Kamukunji	84,365	459	208	313	10	27	56
Kasarani	271,290	6,136	3,349	4,044	53	125	707
Kibra	61,690	737	334	522	9	41	71
Lang'ata	62,239	1,712	1,099	1,012	35	50	258
Makadara	70,361	639	199	503	4	14	45
Mathare	74,967	735	298	560	6	28	62
Njiru	204,563	10,642	4,642	8,484	46	117	886
Starehe	69,389	483	279	316	14	22	63
Westlands	104,980	1,800	1,292	902	37	70	303

Source: KNBS (2019), Kenya Population and Housing Census

On the scale of production, the FAO criterion on land size is used to identify smallholder farmers as those producers that "fall in the bottom 40 per cent of the cumulative distribution" (Khalil et al., 2017). Using this criterion, about 14.5 per cent of the farming households in Nairobi County are "small-scale" farming with a land holding of 0.675 or less acres of land.

Figure 3.1: Scale of operation: Per cent of households



Source: KIHBS 2015/2016. Figures for a period of the 12 months

An overall analysis of the county agricultural production indicates among the top food crops produced by households in Nairobi include maize, kales and beans.

Table 3.2: Distribution of households growing crops by type, county, and sub-county

County/Sub County	Nairobi	Dagoretti	Embakasi	Kamukunji	Kasarani	Kibra
Maize	9,867	2,319	699	95	1,904	187
Kales	9,573	2,057	704	99	1,934	201
Beans	7,610	2,029	526	63	1,283	152
County/Sub-County	Lang'ata	Makadara	Mathare	Njiru	Starehe	Westlands
Maize	533	106	178	2,950	158	738
Kales	734	92	147	2,715	113	777
Beans	414	77	142	2,180	124	620

Source: 2019 Kenya Population and Housing Census

Resource productivity is another key important factor in determining the agro-processing potential (scale) of the county and would have a great impact on farmers' incomes and the county's GCP. An assessment of horticultural productivity indicates Nairobi's value of fruits production in 2019 amounted to Ksh 51.971 million. The area under fruit was 119.04 Ha, with a production of 1630.2 MT. The major fruits grown in order of value importance are banana, avocado, mango and pawpaw.

Table 3.3: Fruits grown in Nairobi County

Type of Fruit	Area in Ha	Production in Tons	Value in Shillings
Banana	52	789	26,216,021
Avocado	20	333	10,742,480
Mango	26	307	10,005,568

Pawpaw	9	88	2,002,900
Loquats	2	53	590,000
Purple Passion Fruits	2	5	500,000
S/Berry	0	2	319,000
Oranges	2	3	300,000
Tangerines	1	3	300,000
Lemons	1	3	300,000
Grapefruits	1	3	300,000
Guavas	2	28	270,000
Tree Tomato	-	8	65,000
Thorn/Horn Melons	1	5	50,000
Macadamia Nuts	0.04	0.2	10,500
Total	**119.04**	**1630.2**	**51,971,469**

Source: Agriculture and Food Authority – AFA (2019)

In 2019, the value of vegetables production in the County amounted to Ksh 226.05 million. The area under vegetables was 502.18 Ha with a production of 46,565.02 MT. The major vegetables grown in order of value importance are tomato, kales, spinach, cowpea, cabbage, leaf amaranth, and African nightshade.

Table 3.4: Vegetables grown in Nairobi County

Type of Vegetables	Area in Ha	Production in Tons	Value in Shillings
Tomato	60	1,791	104,044,548
Kales	166	1,644	32,197,104
Spinach	79	812	19,293,714
Cowpea	37	40,409	11,331,955
Cabbage	20	343	11,136,000
Leaf amaranth	23	398	10,576,307
African nightshade	24	387	10,067,761
Bell pepper/Sweet pepper	17	125	7,173,832
Spider plant	14	113	3,165,554
Brocolli	4	46	2,610,010
Potato	15	167	2,554,410
Lettuce	4	43	2,530,510
Cauliflower	4	43	2,320,020
Egg plant	8	74	2,155,000
Carrots	7	63	1,747,000

Cucumber	4	35	1,073,634
Courgettes/Squash/ Marrow	2	21	641,319
Pumpkin fruit	3	22	400,000
Pumpkin leaves	1	9	348,000
Garden peas	6	3	192,000
French beans	2	3	120,000
Russian comfrey/ Mafaki	0	2	110,000
Butter nut	1	5	100,000
Beetroot	1	6	90,000
Malabor Gourd/ Kahurura	0.1	1	50,000
Vine Spinach/ Nderema	0.08	0.02	20,000
Total	**502.18**	**46,565.02**	**226,048,678**

Source: Agriculture and Food Authority – AFA (2019)

In 2019, the value of MAPs production in the County amounted to Ksh 22.35 million. The area under MAPSs was 56 Ha with a production of 579 MT. The major MAPs grown are bulb onion, corriander, and leeks.

Table 3.5: Medicinal and Aromatic Plants (MAPs) grown in Nairobi County

Type of Medicinal and Aromatic Plants (MAPs)	Area in Ha	Production in Tons	Value in Shillings
Bulb Onion	17	225	10,014,998
Corriander	14	141	4,738,393
Leeks	8	80	4,254,758
Spring Onion/Green Shallots	15	121	2,644,260
Celery	2	12	700,008
Total	**56**	**579**	**22,352,417**

Source: Agriculture and Food Authority – AFA (2019)

Floriculture is a key sub-sector in the agriculture sector and a major contributor of foreign exchange after diaspora, tourism, and tea. The flowers grown in Nairobi County are Roses. In 2019, the value of flowers production in the County amounted to Ksh 1.68 billion. The area under flowers was 40 Ha with a production of 420 MT.

Table 3.6: Flowers grown in Nairobi County

Flowers	Area in Ha	Production in Tons	Value in Shillings
Roses	40	420	1,680,000,000

Source: Agriculture and Food Authority – AFA (2019)

Regarding animal production, households in Nairobi County mainly rear poultry, goats, dairy cattle, sheep, and pigs. A lower percentage of farming households practice bee keeping (apiculture) and aquaculture.

Table 3.7: Distribution of households rearing livestock and fish by county and sub-county

County/Sub County	Kenya	Nairobi	Dagoretti	Embakasi	Kamukunji	Kasarani	
Indigenous chicken	3,337,700	16,471	2,567	1,593	217	2,853	
Goats	1,898,887	3,863	548	389	32	636	
Exotic chicken layers	194,517	3,432	576	405	55	611	
Exotic cattle -Dairy	939,916	2,286	577	210	14	423	
Exotic chicken broilers	79,461	1,813	281	202	32	314	
Sheep	1,299,893	1,754	340	144	23	226	
Pigs	110,383	1,586	548	188	5	286	
Rabbits	124,122	1,253	234	137	13	232	
Indigenous cattle	2,260,439	1,242	160	187	13	156	
Exotic cattle -Beef	167,625	595	116	79	10	112	
Donkeys	500,682	286	15	44	3	27	
Fishponds	22,019	208	23	22	8	42	
Beehives	201,406	154	23	11	1	16	
Fish cages	3,361	57	7	10	2	11	
County/Sub County	Kibra	Lang'ata	Makadara	Mathare	Njiru	Starehe	Westlands
Indigenous chicken	364	675	371	381	6,636	230	584
Exotic chicken layers	74	141	106	120	1,125	57	162
Exotic chicken broilers	72	58	63	69	607	34	81
Goats	71	180	64	107	1,643	51	142
Indigenous cattle	45	134	15	46	401	35	50
Exotic cattle -Dairy	44	135	32	42	644	40	125
Sheep	35	158	18	47	647	21	95
Rabbits	34	52	34	33	418	19	47

Exotic cattle -Beef	12	38	11	24	138	23	32
Donkeys	7	18	5	15	141	7	4
Pigs	7	37	51	42	364	10	48
Beehives	5	40	4	12	20	9	13
Fishponds	5	29	2	4	39	7	27
Fish cages	1	7	1	2	5	2	9

Source: KNBS (2019), Kenya Population and Housing Census

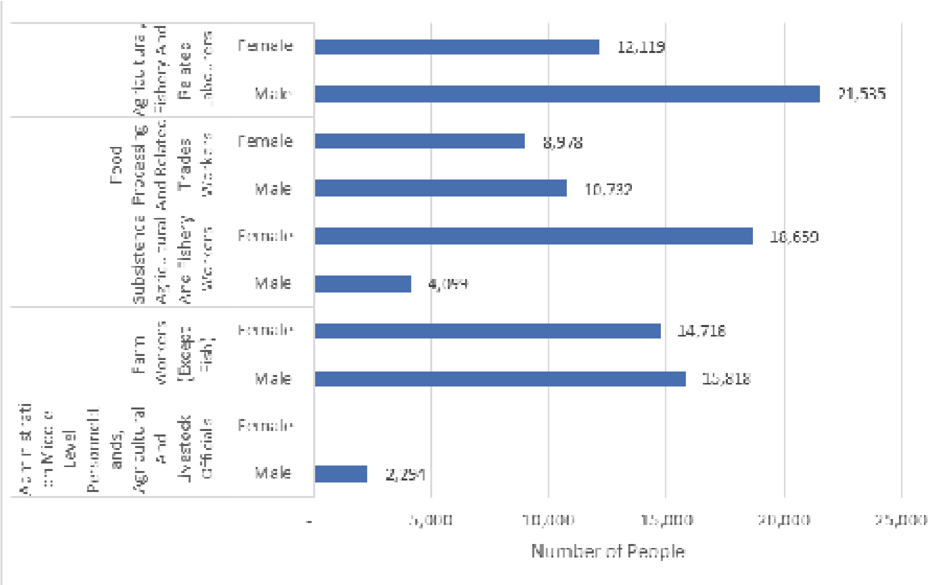
The above characterization of farming households highlights the priority value chain opportunities in maize, kales, beans bulb onion, corriander, leeks, tomato, kales, spinach, banana, avocado, mango, pawpaw, poultry, goats, dairy cattle, sheep, and pig farming. With majority of the households farming the identified products, the current Nairobi transformation strategy in agriculture should prioritize value chains in the identified areas to positively impact household's livelihoods.

Agri-Food Challenges in COVID-19

i) Human capital/Employment levels – by gender

Agricultural labour participation in Nairobi indicates relative dominance by either gender in specific agriculture-related occupations. Majority of the population in Nairobi are the agricultural, fishery and related labourers. The workers in this sub-major group include farmhands and related labourers; forestry labourers; and fishery, hunting and trapping labourers. The second most popular sub-category of workers are farm workers where the group covers occupations related to: field crop, vegetable and horticultural farm workers; poultry, dairy and livestock producers; and crop and animal producers. The popular category among female workers in Nairobi County is the subsistence agricultural and fishery workers. The workers in this sub-major group grow and harvest field or tree and shrub crops, grow vegetables and fruit, tend or hunt animals, gather wild fruits and plants, catch fish and gather other forms of aquatic life to provide food, shelter and a minimum of cash income for themselves and their households. The classifications are based on the Kenya National Occupational Classification Standard (KNOCS).

Figure 3.2: Agriculture related labor force participation



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

An assessment of the COVID-19 effects on hours worked in agriculture-related occupations indicates workers in majority of the identified sub-sectors worked fewer hours in the reference period compared with the usual hours worked per week. The most affected workers are the agricultural, fishery and related labourers who recorded the highest difference of 8 hours between the usual and actual hours worked in a week.

Figure 3.3: Changes in hours worked by in agriculture related occupations

Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

The identified COVID-19 effects on labour force participation are likely to have negative effects on output thereby increasing yield gaps.

ii) **Market operations**

Successful transformation of smallholder agricultural production in Nairobi County from subsistence to an innovative, commercially oriented, and modern agricultural sector, as aspired in the national ASTGS, is dependent on the ability of the County to market its commodities both in domestic, regional, and international markets.

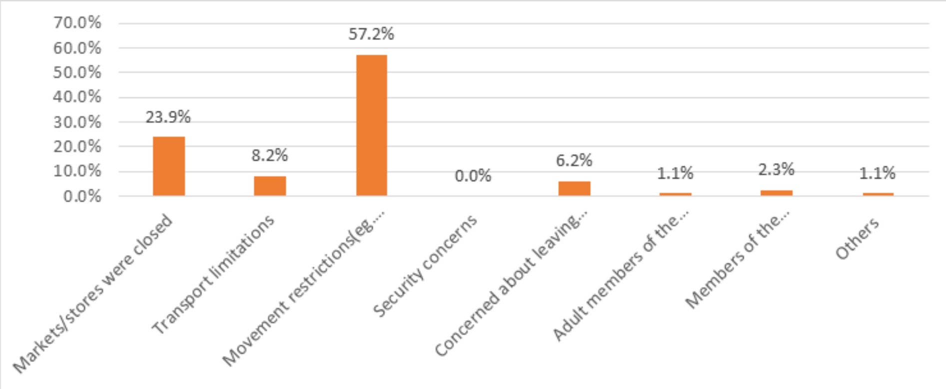
As a result of COVID-19, there has been a further slow down on trade activities due to the restrictions on movements. From the KNBS conducted between 30th May and 6th June 2020, 11.1 per cent of the households in Nairobi County indicated that over the past 1 week, there had been instances where the household or a member of the household could not access the markets/grocery stores to purchase food items.

Figure 3.4: Limited access to markets to purchase food items

Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Majority of the households indicated the key reasons for not accessing the markets/ grocery stores to purchase food items were movement restrictions (57.2%) and closure of the markets/grocery stores (23.9%).

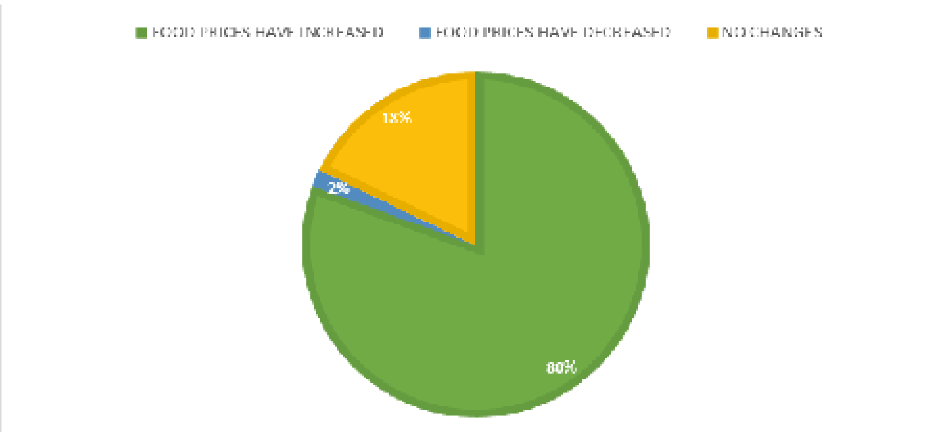
Figure 3.5: Reason for limited access to markets/ grocery stores



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Restrictions affecting seamless movement of food commodities are likely to cause a hike in prices in non-production areas and fall in prices in production areas. 80 per cent of households in Nairobi County indicated that that food prices had increased over the past 2 weeks from the reference period, while 18 per cent indicated that they had not experienced a change in the prices

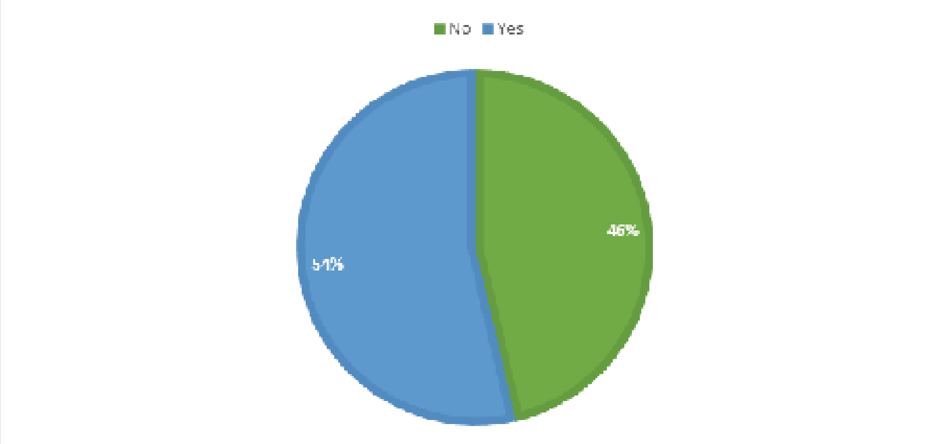
Figure 3.6: Percentage of households experiencing change in food commodity prices



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

On the magnitude of the price shocks, 54 per cent of the households indicated they faced a large rise in food prices in the past two weeks from the reference period.

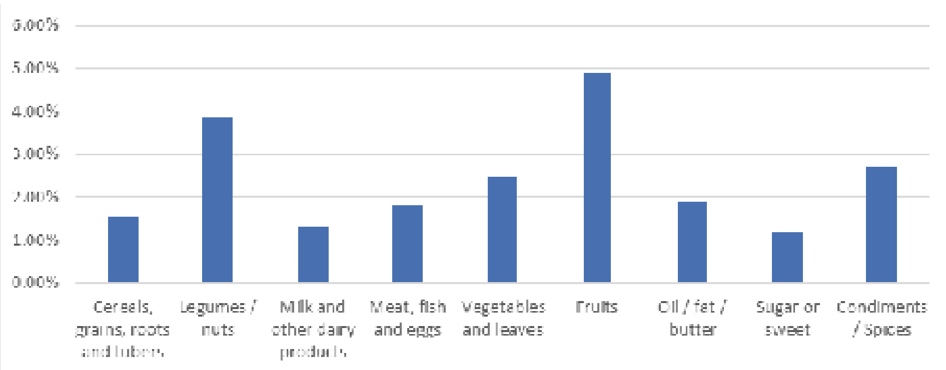
Figure 3.7: Proportion of households facing large food price shocks



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Poor access to markets also hinders the ability to supply food to the population as shown in the below figure.

Figure 3.8: Per cent of households reporting that the following food items were not readily available in their locality

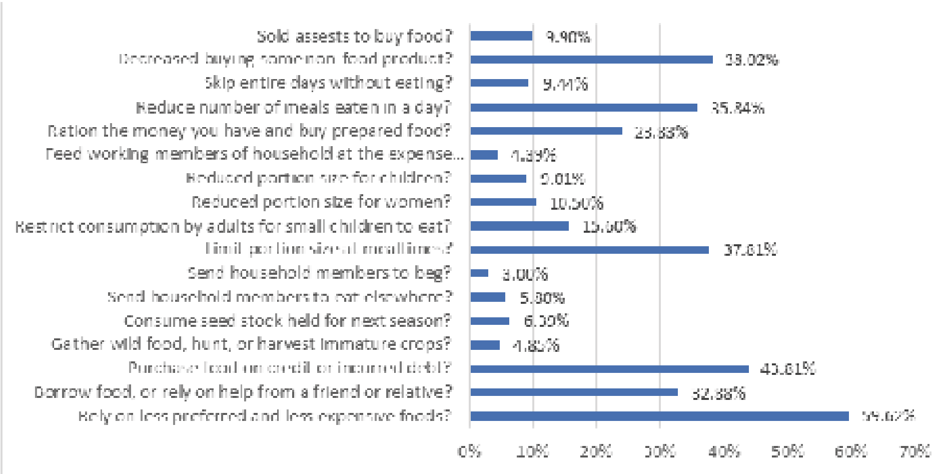


Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

While access to all food groups were affected as shown in the figure above, a key concern is that the food groups affected most are the nutritious food categories- fruits, legumes/nuts and vegetables, which are necessary for boosting the immune system of the population.

Among the key strategies adopted by households to mitigate COVID-19 effects on food consumption include relying on less preferred and less expensive foods (59.62%), purchase food on credit or incurred debt (43.81%), decreased buying some non-food products (38.02%), and limit portion size at mealtimes (37.81%).

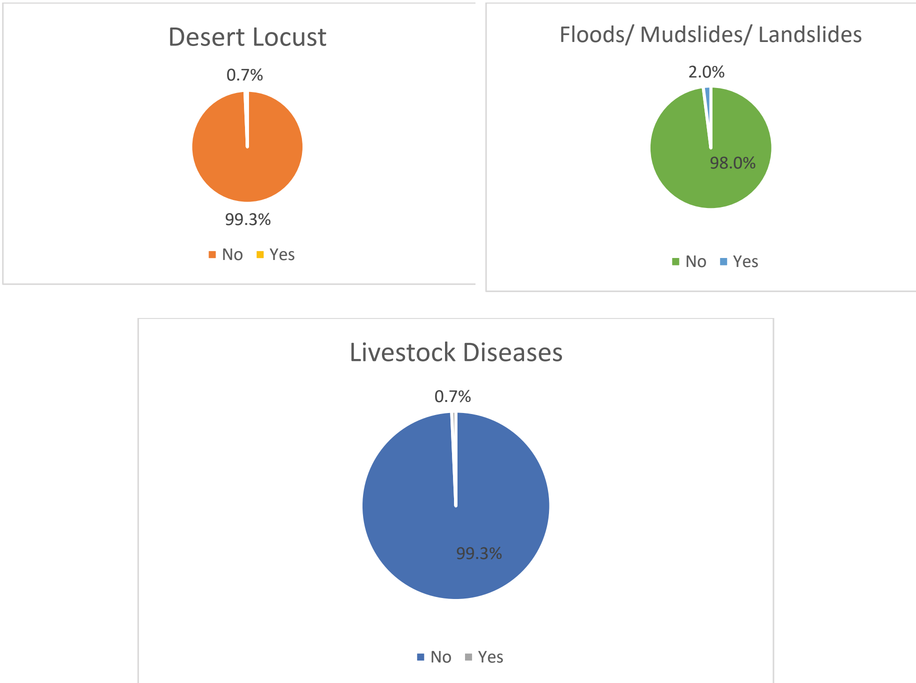
Figure 3.9: Per cent of households where the following strategies were adopted for at least one day



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Additional challenges faced by the County, albeit at low levels during the COVID-19 pandemic period include Desert locusts (0.7%); Floods/ Mudslides/ Landslides (2%); and Livestock Diseases (0.7%).

Figure 3.10: Percentage of households who experienced the below shocks in the past two weeks the KNBS Wave 2 survey



Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Agri-Food Constraints Faced in the County

Among the key constraints the county faces include:

(i) Low access by farmers to quality and affordable inputs including certified seeds, water, animal feeds, artificial insemination (AI) services, fertilizers, and livestock vaccination

(ii) Low commercialization of farming where majority of farmers practice farming for subsistence purposes and as a hobby rather than a business.

(iii) Flash Floods affecting farm productivity

(iv) Low agro-processing and value addition opportunities among small scale farmers

(v) Slow uptake of digital platforms to market agricultural produce.

(vi) Need to enhance/ revive extension services in the County

(vii) Farm losses and post-harvest waste.

The above challenges lead to the overall impact of reducing farm output, farmer incomes and increasing the vulnerability of households to food insecurity and climate variability particularly drought and flood episodes.

3.2 Opportunities with COVID-19 in Agriculture Sector

The County has opportunities in:

a) Developing County-private partnership in enhancing agro-processing and value addition capacities and linking farmers to product markets, including livestock products.

b) Storage and cooling facilities, including at collection points, to minimize post-harvest losses and spoilages.

c) Promotion of contract farming to ensure farmers have ready buyers for their produce.

d) Uptake of digital platforms to build capacities of farming households in modern agricultural technologies, and market agricultural produce.

e) Enhance farmers access to supportive services to include early-warning systems, extension advisory and information services, and training on natural resource management, fodder conservation and value addition.

f) Strengthening farmers access to input supply such as certified seeds and fertilizer, vaccination, pesticides, and herbicides, and animal feeds.

g) Strengthening farmers' associations and cooperatives as an additional solution to marketing challenges.

h) Improved crop and livestock emergencies surveillance systems in the county.

3.3 Emerging Issues

(i) Climate change, manifested in increased frequency and intensity of extreme weather conditions such as floods, droughts, and pest invasion.

(ii) Environmental degradation because of both human and non-human-related activities such as extreme climate conditions. Environmental degradation has reduced the productive capacity of land leading to increased risks to food insecurity and reduced farmers' income.

3.4 Recommendations

To successfully build resilience and enhance growth of the agriculture sector, the County will:

(i) Develop partnership with the National Government, NGOs, development partners, research institutions, and the private sector in enhancing agro-processing and value addition capacities of the County, particularly in horticultural and poultry production as envisioned in the national Agricultural Transformation and Growth Strategy (ASTGS).

(ii) Invest in storage and cooling facilities to minimize spoilage and post-harvest losses.

(iii) Enhance availability of affordable formal credit targeting urban value chain innovations and technology in support of urban farming.

(iv) Digitize the agri-food sector to support: training and building capacities of farming households in modern agricultural technologies, provision of advisory and information services, marketing agricultural produce at a wider scope beyond the County level and improving access to innovative support services including credit and insurance services.

(v) Access to quality and affordable inputs including certified seeds, water, animal feeds, Artificial Insemination services, fertilizers, and livestock vaccination.

(vi) Establish programmes for surveillance of disasters such as extreme weather conditions, crop pest and diseases, and livestock disease at the County level equipped with relevant technical specialists and finances to effectively prepare, respond and prevent risks. In addition, there is need for the County to mitigate disasters, such as those related to floods, through institutional capacity development, vulnerability analyses and updates, monitoring and early warning systems, and public education.

(vii) Exploit market opportunities within the several economic blocks in the County to enhance food security in Nairobi City County.

(viii) Strengthen agricultural cooperatives through effective stakeholder engagement and implementation of interventions for more sustainable models of financing and customized training of cooperative members.

4. Water, Sanitation, and Hygiene

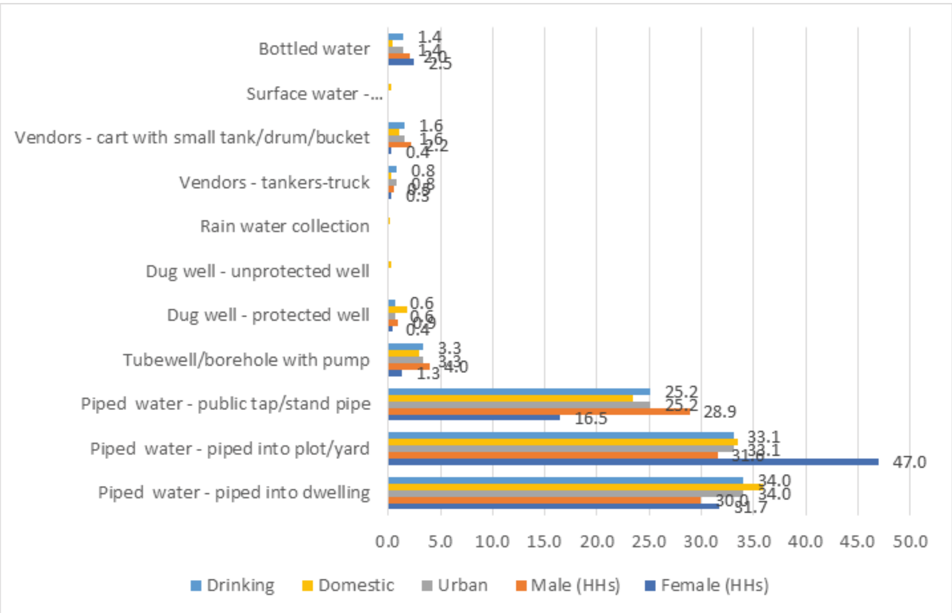
4.1 Characteristics of the Sector

Water supply for the County is from Ndakaini Dam located 50 km on the outskirts of the capital, and which supplies 500 million of litres of water used by the city each day. The dam supplies 85 per cent of the water used by the city. Additionally, there is also the Kikuyu Springs, the oldest underground source for freshwater drinking source serving Kikuyu Town and other surrounding areas adjacent to the city. Other sources of water are borehole and dug well water.

Access to source of water by households

The major source of water for drinking utilized by households (33.1%) piped water into plot/yard, piped water into dwelling (34%), piped water in a public tap/stand tap (25.2%) and tube well (3.3%). Likewise, both male (31.6%) and female (47.0%) headed households have access to piped water into the plot.

Figure 4.1: Access to sources of water by households



Source: KNBS 2015/2016

Combating the COVID-19 pandemic has already placed high demand for water for both domestic usage in households, health care institutions, learning institutions, marketplaces, and other public places. Water also remains important to other sectors of the economy, such as agriculture and industrial usage, among others.

The re-opening of schools after the closure due to the pandemic, and subsequent low rain seasons meant that pressure on water resources would be high, and if the supply is low, households are likely to fail to observe COVID-19 prevention measures of hand washing, which may in turn lead to high transmission of COVID-19.

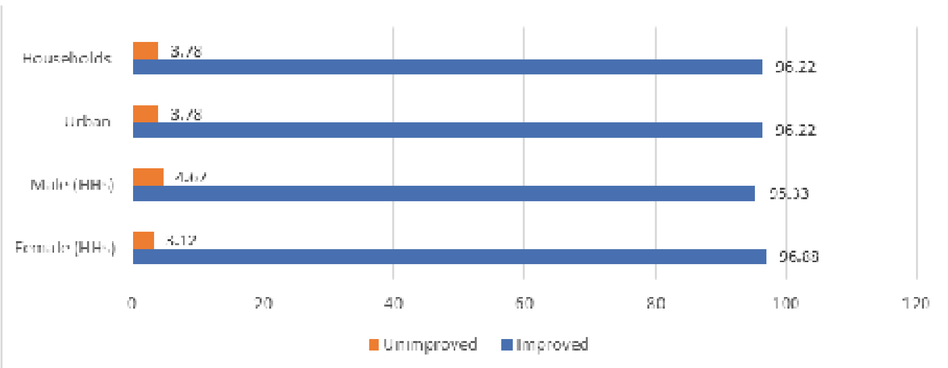
To ensure continuity of quality water supply, there is need for the County to invest in water harvesting and storage facilities both at household and institutional level. This may include supporting schools in building rain harvesting and storage structures from the school structure rooftops and supporting households in rainwater harvesting during rainfall times. Other interventions may include digging boreholes and supplying water to households that experience water scarcity.

For equality in access to water, the county government could waive or reduce water bills for urban households that use piped water and support water vendors in access to clean safe water at a reduced cost. This will mean financial support to water service companies. Other long-term measures include inclusion of both rural, urban and peri-urban dwellers in decision-making regarding water management and governance.

Access to sources of water by households (improved and unimproved sources)

Clean and safe water is essential for good health and goes a long way in ensuring reduced infections. Access to improved drinking water[2] is high in the county among households (96.2%), and among male and female headed households as shown in the figure below.

Figure 4.2: Access to improved and unimproved sources of water by households



Source: KNBS 2015/2016

2 Improved sources of water include water from the following sources: piped water - piped into dwelling, piped water - piped into plot/yard, piped water - public tap/standpipe, tube well/borehole with pump, dug well - well protected, dug well - unprotected well, water from spring - protected spring). Unimproved sources of water, which include: water from spring - unprotected spring, rainwater collection, vendors - tankers-truck, vendors - cart with small tank/drum/bucket, vendors-bicycles with bucket, surface water river/streams/pond/dam/lake/canal/irrigation channel bottled water. This is according to WHO and UN classification of sources of water.

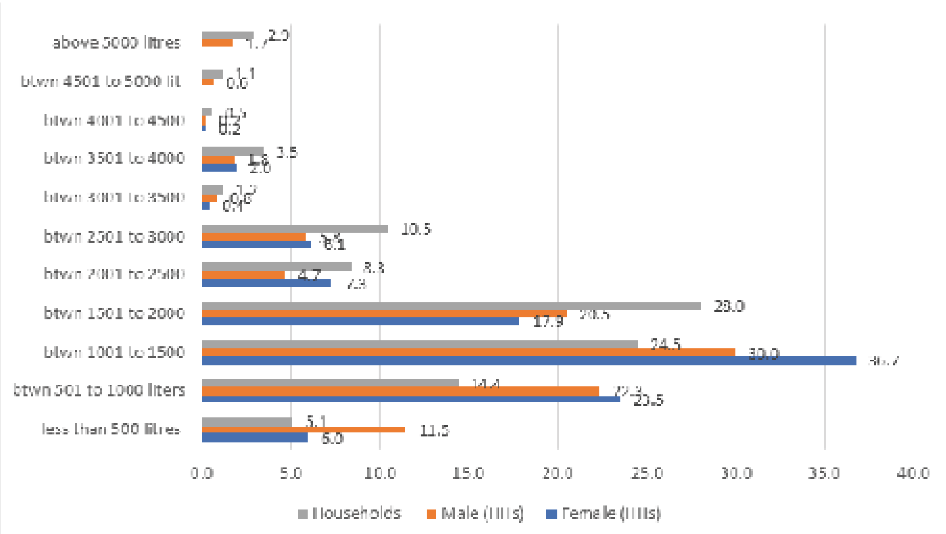
Inequalities in access to safe and clean drinking water may put households at risk of contracting infectious diseases and make the households less observance of COVID-19 measures of hand hygiene. One mitigation measure that may be undertaken by the county to increase access to improved water source include connecting the households with piped water and increasing the development of improved sources of water especially in rural areas. The long-term measures to support access to water in all households is to have both male- and female-headed households to be part of water management/governance team and in decision-making in water management.

The other important consideration is to have separate water drinking point for livestock, different from the household water drinking water sources to minimize water contamination, and conflict over water resource. There is also need to avoid agricultural activities along the upstream to minimize water pollution.

Volumes of water used by households in a month

Most households (28%) use between 1,501 and 2,000 litres of water per month compared to male- (30.0%) and female- (36.7%) headed households using between 1,001 and 1,500 litres of water in a month.

Figure 4.3: Volume of water used in a household in a month

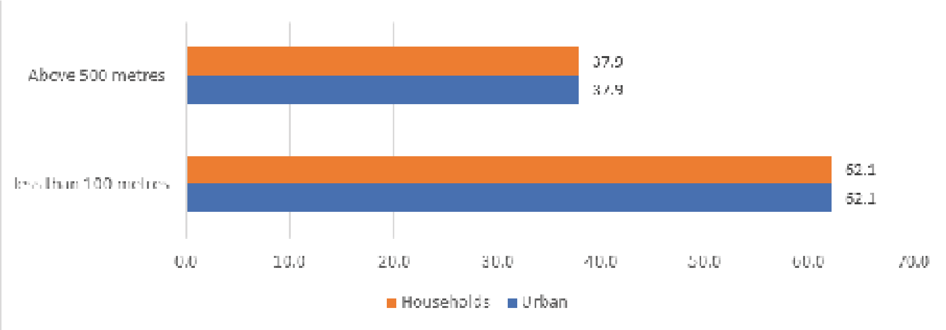


Source: KNBS 2015/2016

Distance covered by households to and from water source

Majority of households are urban and cover less than one hundred metres to water sources, meaning they have water within their premises or close to their compounds. Only a small portion of the households cover more than five hundred metres as shown below.

Figure 4.4: Distance covered by households to and from water sources

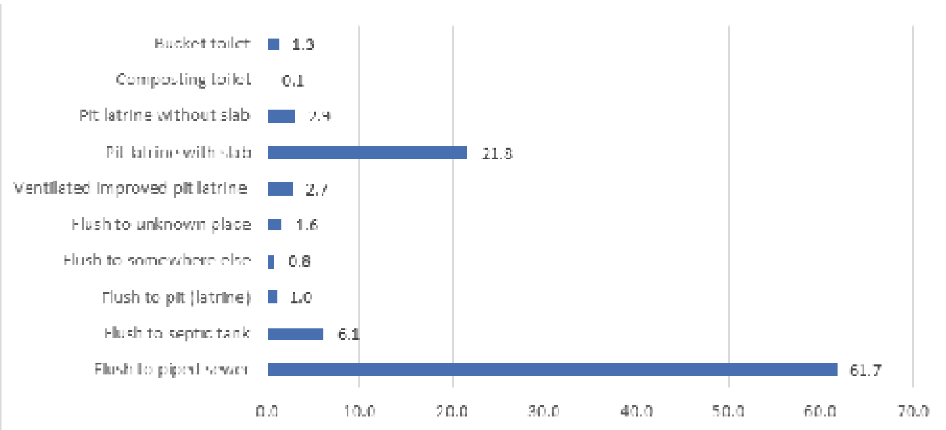


Source: KNBS 2015/2016

Access to sanitation

The common sanitation methods utilized by majority urban households are flush to piped sewer (61.7%) and pit latrine with slab (21.8%). Access to sanitation is very important since it can help detect the genetic residues of diseases in wastewater as those who are infected are thought to shed traces of the virus in faeces, thus prompting for immediate action from the health officials.

Figure 4.5: Access to sanitation by households



Source: KNBS 2015/2016

Access to improved and unimproved sanitation

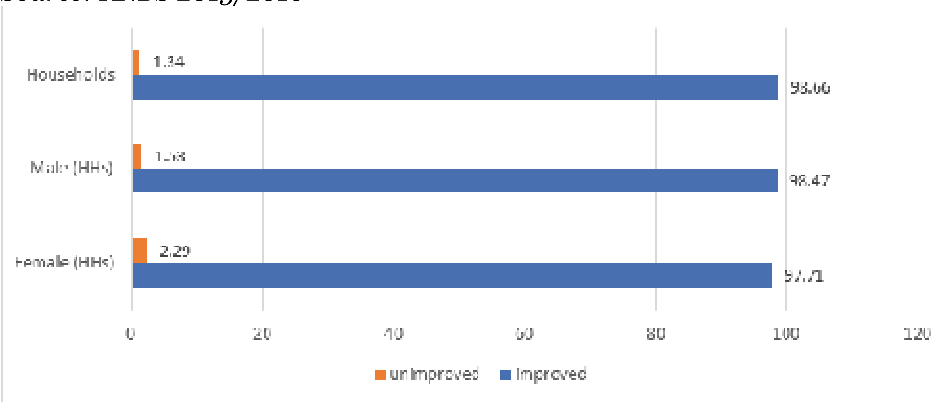
Majority of households, both male- and female-headed households, have access to improved sanitation facilities[3]. Access to improved sanitation is very important in maintaining hygiene and keeping away infectious diseases. Good sanitation can help detect the genetic residues of diseases in wastewater as those who are infected

3 Improved sanitation includes: flush to piped sewer, flush to septic tank, flush to pit (latrine), flush to somewhere else, flush to unknown place, ventilated improved pit latrine, pit latrine with slab, pit latrine without slab). Unimproved sanitation includes: composting toilet, bucket toilet, hanging toilet/hanging, no facility/bush/field, others

are thought to shed traces of the virus in faeces, thus prompting for immediate action from health officials.

Figure 4.6: Access to improved and unimproved sanitation by households

Source: KNBS 2015/2016

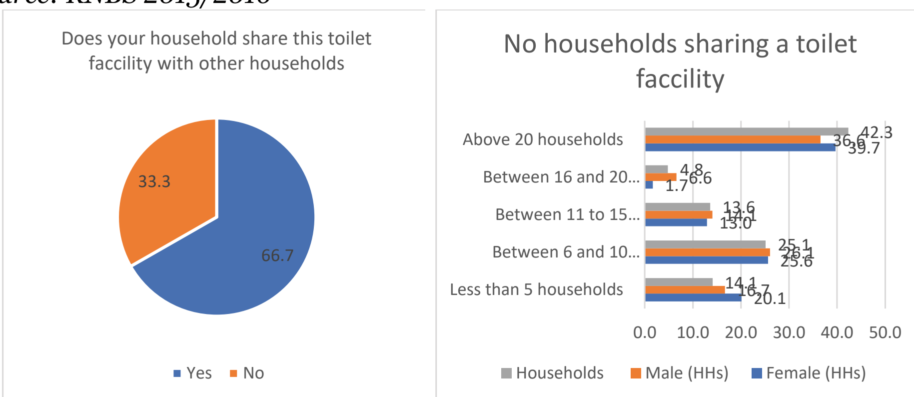


Sharing of a toilet facility

Majority of households (66.7%) share a toilet facility with other households. Additionally, there are large proportions of households (42.2%) male- (36.6%) and female- (39.7%) headed households who share a toilet with other households. Only a small proportion of households (14.1%) male- (16.7%) and female- (20.1%) headed households share a toilet facility with less than 5 other households.

Figure 4.7: No. of households sharing a toilet facility

Source: KNBS 2015/2016



Sharing of toilet facilities with large number of households puts individuals at risk of contracting COVID-19, and other infectious diseases in cases where proper hygiene is not maintained, and social distancing measures are not in place.

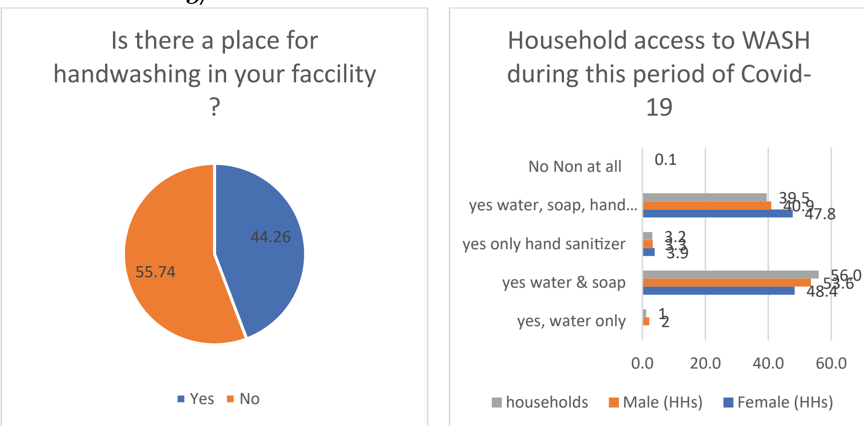
Similarly, the WHO guidelines require separate sanitation facilities for suspected COVID-19 cases, which households may not be able to achieve

Access to WASH during the COVID-19 period

Water, Sanitation and Hygiene (WASH) helps curb transmission of infectious diseases. Despite this, only a few households (44.2%) have a handwashing facility in their households. Most households (56%) male- (53.6%) and female- (48.4%) headed households have access to WASH (water and soap) during the period of COVID-19. An additional 39.5 per cent of households have access to both water, soap and hand sanitizer, with male-headed households at 40.9 per cent and female-headed households at 47.8 per cent. Only a small portion of households have access to water only.

Figure 4.8: Access to wash during the COVID-19 period

Source: KNBS 2015/2016



More of hand washing should be emphasized especially to those who are not observing hand hygiene to help decrease the spread of the virus. This should be facilitated by provision of water, soap/hand sanitizer to households.

4.2 Opportunities with COVID-19 in various sectors

COVID-19 has highlighted the need to maintain clean safe water, proper sanitation and hand hygiene, which place more demand on water. Therefore, the county needs to leverage on lessons learned from COVID-19 by improving its water and sanitation coverage.

4.3 Emerging Issues

Water companies have lost a significant amount of their revenue due to low demand of water and sanitation services mostly from hotels, schools, and other institutions due to closure of operations. This, in the long run, may affect the delivery, development, and rehabilitation of WASH services.

4.4 Recommendations

To successfully build resilience and enhance growth of the WASH sector, the County will:

(i) Expand and rehabilitate the existing piped water connection infrastructure to help increase access to water. Access to piped water stands at 34.7 per cent. This means low revenue from piped water for the county. Similarly, it also implies low access to clean and safe water which is guaranteed through piped water system. There is need to increase piped water connectivity to households to increase access to safe water and increase revenue. This can be achieved by expanding water infrastructure. The County government could collaborate with the private sector, non-governmental organizations and the local community to expand the water infrastructure.

(ii) The County could increase water supply in households, institutions, and public places by drilling boreholes in all the sub-counties.

(iii) Expand sewer infrastructure to accommodate more households; currently there is a higher access to piped sewer among households, which is 61.72 per cent. This means higher revenue collection from sanitation services and access to safe sanitation.

(iv) Improve access to safe and improved toilets in schools, health care facilities, workplaces, and public places. About 66.72 per cent of households share a toilet with other households, and this puts individuals at risk of contracting COVID-19 and other infectious diseases in cases where proper toilet hygiene is not maintained. Increased access to sanitation can be achieved through collaboration of the county government, development partners and PPP to expand sewer infrastructure and to accommodate more households.

(v) Promote the importance of handwashing and construct WASH facilities to increase access at the household level. Access to WASH (water and soap) is 56 per cent among households during the period of COVID-19. On the other hand, 44.26 per cent of households do not have a designated handwashing facility in their households. This may compromise hand washing hygiene of households. Increased access to WASH can be achieved by sensitization on the importance of handwashing and construction of WASH facilities at the household level. Collaboration between County Government, Non-Governmental Organizations, local community, and the media is important to realize increased access to WASH.

5. Manufacturing, Trade and MSMEs

5.1 Characteristics of the Sector

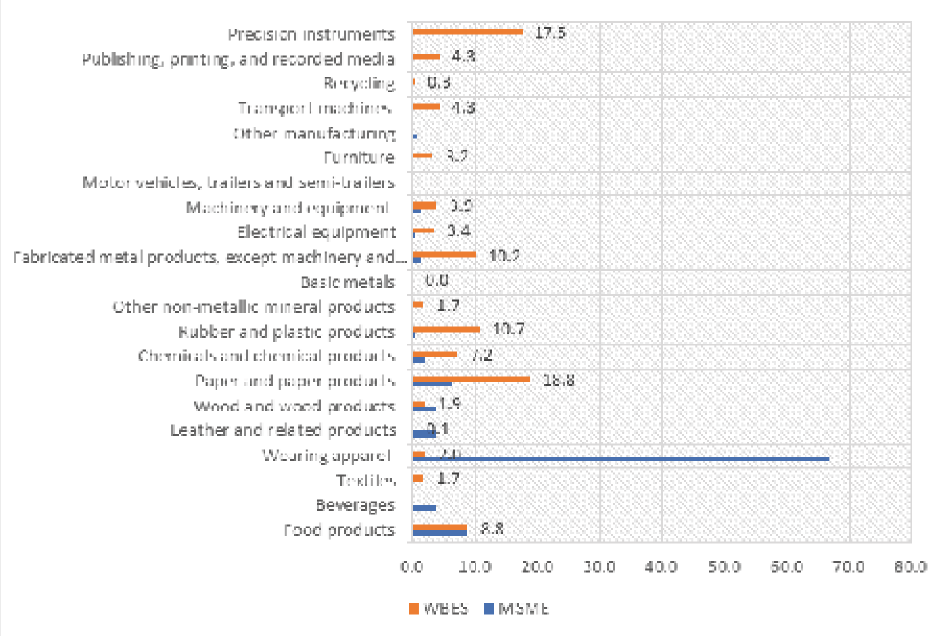
a) Manufacturing sector

Nairobi City County has 23,770 establishments involved in manufacturing activities, which comprise 6.8 per cent of a total of 351,414 firms (KNBS, 2016). In terms of size 18,472 (77.7%) are micro, 3,169 (13.3%) are small, 621 (2.6%) are medium and 1,508 (6.3%) are large enterprises. The main drivers of the economy of the county include agriculture (0.3%), services (40.0%), and manufacturing (25.1%) (GCP, 2019).

Sector of operation

According to the KNBS 2016 survey, the key sub-sectors that drive manufacturing in Nairobi City County include: wearing apparel (66.9%), food products (8.8%), paper and paper products (6.4%), wood and wood products (3.8%), leather and related products (3.8%), among others. The World Bank Enterprise Survey (WBES) of 2019 compliments these findings and provides that additional evidence on the sub-sectors key to manufacturing (Figure 5.1). They include paper and paper products (18.8%), precision instruments (17.5%), rubber and plastic products (10.7%), fabricated metal products except machinery and equipment (10.2%), and food products (8.8%). These are sub-sectors that are considered essential in dealing with COVID-19 and are likely to experience increased activity with focus on food production, production of Personal Protective Equipment (PPEs) and hospital beds.

Figure 5.1: Sector of operation in manufacturing

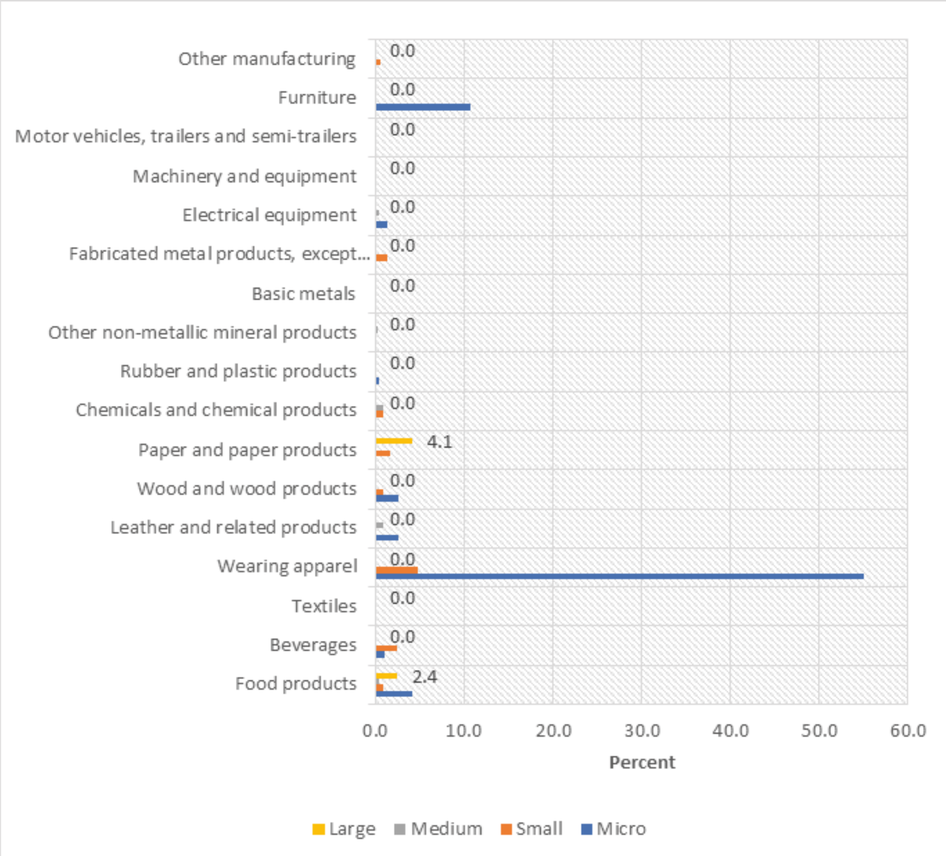


Source: KNBS (2016) and WBES (2019)

Sector of operation by size

Majority of the establishments in Nairobi City County are micro in nature and operate in the wearing apparel (55.1%), furniture (10.7%), food products (4.1%), wood and wood products (2.6%), and leather and related products (2.6%) (Figure 5.2). Small-sized establishments operate in wearing apparel (4.7%), beverages (2.4%), paper and paper products (1.6%), among others. Additionally, large enterprises are found in paper and paper products (4.1%), and beverages (2.4%).

Figure 5.2: Manufacturing firms by sector and size

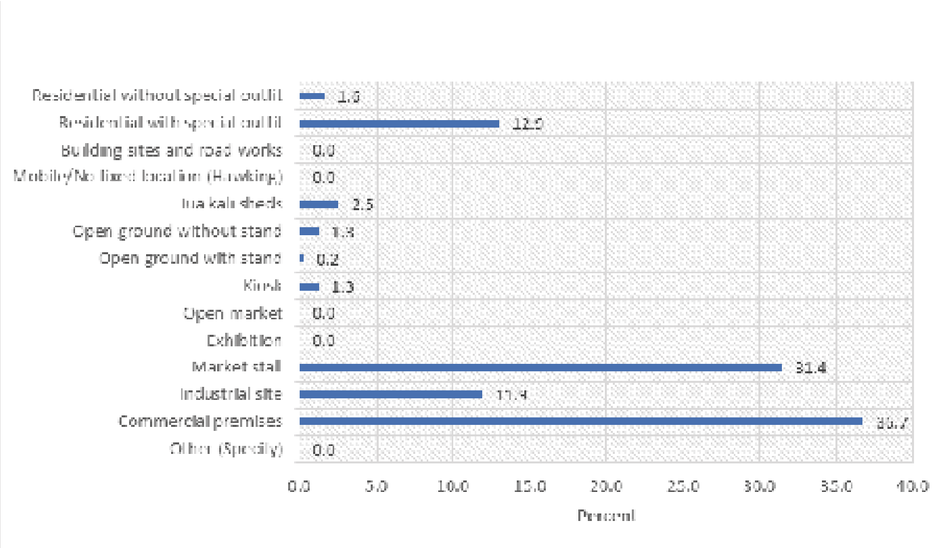


Source: KNBS (2016)

Location of manufacturing firms by type of premises

The common premises used by manufacturing firms in Nairobi City County include commercial premises (36.7%), market stall (31.4%), residential with special outfit (12.9%), and industrial site (11.9%) (Figure 5.3).

Figure 5.3: Location of manufacturing firms by premises



Source: KNBS (2016)

Distribution of manufacturing firms by gender and size

Manufacturing establishments in Nairobi City County are owned by male (48.1%), with females comprising 23.7 per cent while 28.2 per cent are owned jointly. In terms of micro-sized firms, 48.1 per cent are male-owned, 27.2 per cent female-owned and 24.6 per cent jointly owned. Small-sized firms are owned jointly (53.4%), male-owned (27.6%) while 19.0 per cent are female-owned. For medium-sized establishments, 84.8 per cent are male-owned while 15.2 per cent are jointly owned. With large-sized firms, 75 per cent male-owned while 25 per cent are jointly owned (Table 5.1).

Table 5.1: Distribution of Manufacturing firms by gender and size - N (%)

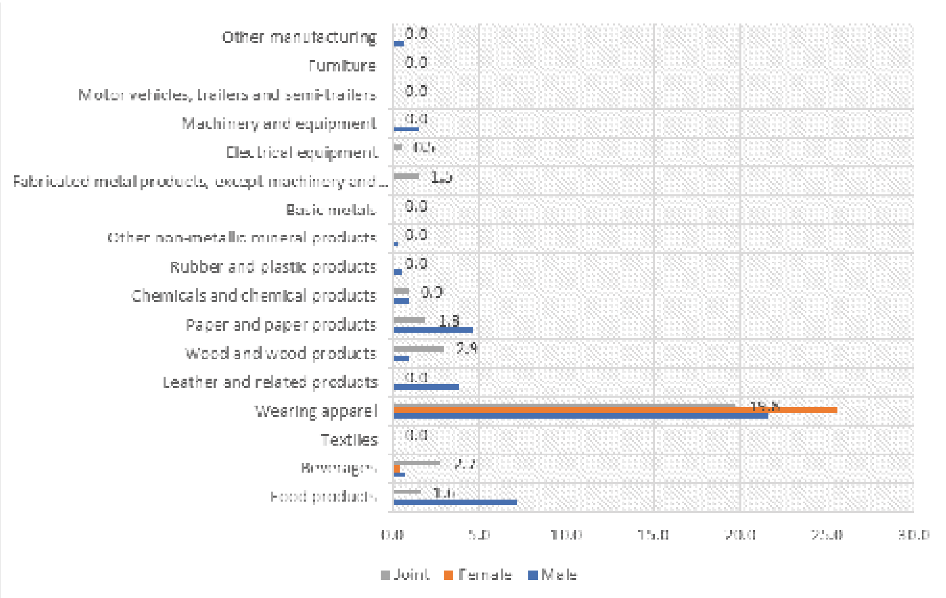
Gender	A11	Micro	Small	Medium	Large
Male	11,423 (48.1)	8,891 (48.1)	875 (27.6)	527 (84.8)	1,131 (75.0)
Female	5,636 (23.7)	5,033 (27.2)	603 (19)	0 (0)	0 (0.0)
Joint	6,712 (28.2)	4,548 (24.6)	1,692 (53.4)	95 (15.2)	377 (25.0)
Total	23,770 (100.0)	18,472 (100.0)	3,169 (100.0)	621 (100.0)	1,508 (100.0)

Source: KNBS (2016)

Distribution of manufacturing firms by gender and sector

Majority of the sub-sectors in manufacturing are male dominated, including wearing apparel (21.5%), food products (7.1%), paper and paper products (4.5%), among others. Females are mostly found in the wearing apparel (25.6%) and beverages (0.4%) (Figure 5.4). Additionally, there is a joint ownership between males and females in the following manufacturing sub-sectors: wearing apparel (19.8%), wood and wood products (2.9%), and beverages (2.7%).

Figure 5.4: Distribution of manufacturing firms by gender and sector



Source: KNBS (2016)

In terms of employment, the manufacturing sector employs more men (65.7%) than women (34.3%). Most men are found in the large-sized firms (32.7%) while 10.5 per cent are in micro-sized establishments. Majority of the women are mostly in the large establishments as well (14.9%) (Table 5.2).

Table 5.2: Employment by gender and size for manufacturing firms

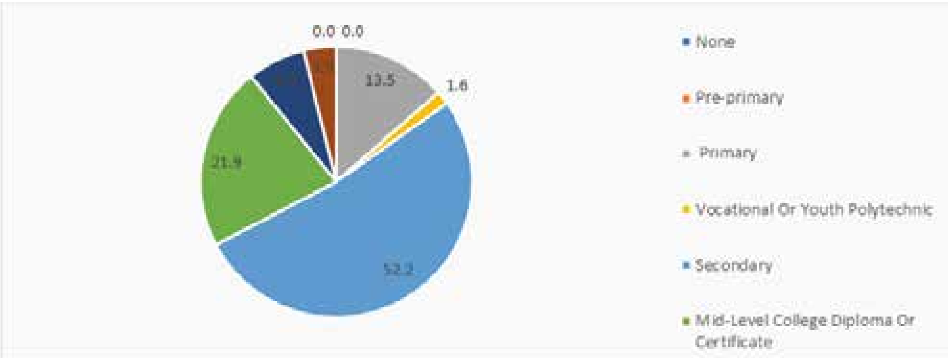
Number of employees	Micro	Small	Medium	Large	Total
Male	39,163 (10.5)	50,005 (13.4)	33,707 (9)	122,120 (32.7)	244,994 (65.7)
Female	37,968 (10.2)	26,141 (7)	8,397 (2.3)	55,595 (14.9)	55,595 (34.3)
Total	77,131 (20.7)	76,146 (20.4)	42,104 (11.3)	177,714 (47.6)	373,095 (100)

Source: KNBS (2016)

Education levels of manufacturing firm owners

Education levels of manufacturing firm owners in Nairobi City County are depicted in Figure 5.5 as follows: secondary (52.2%), mid-level college diploma or certificate (21.9%), primary (13.5%), degree (6.9%), pre-primary education (3.9%).

Figure 5.5: Education levels of manufacturing firm owners

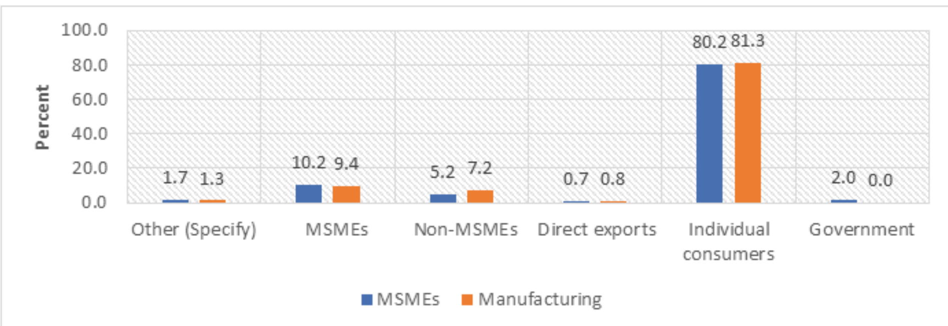


Source: KNBS (2016)

Source of markets

Majority of manufacturing firms and MSMEs in general rely on individual consumers for markets at 81.3 per cent and 80.2 per cent, respectively (Figure 5.6).

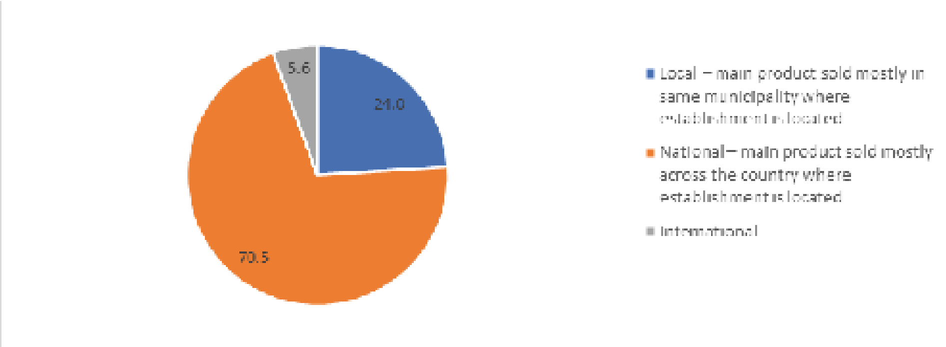
Figure 5.6: Source of markets



Source: KNBS (2016)

In addition, manufacturing firms and MSMEs also trade with other MSMEs, non-MSMEs and government. About 0.8 per cent of those in manufacturing and 0.7 per cent of MSMEs are involved in direct exports, implying susceptibility to exogenous shocks because of COVID-19. The WBES 2019 also echoes the same, with 5.5 per cent of manufacturing firms sourcing for markets internationally (Figure 5.7).

Figure 5.7: Source of markets

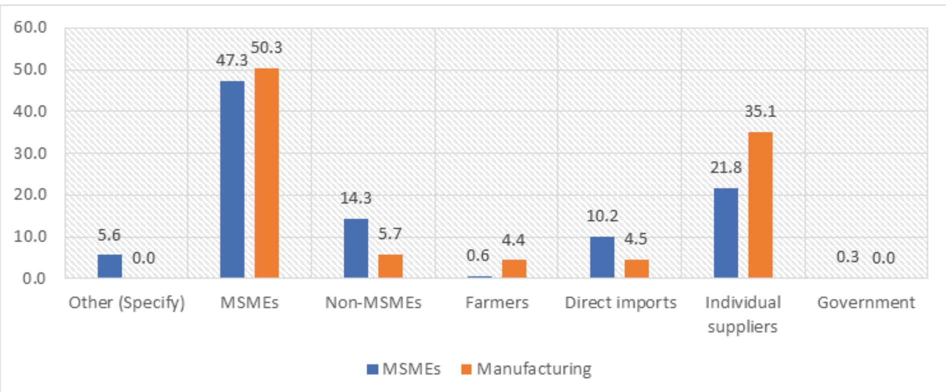


Source: WBES (2019)

Source of material inputs

Overall, manufacturing establishments and MSMEs source for material inputs from among MSMEs at 50.3 per cent and 47.3 per cent, respectively (Figure 5.8). Individual suppliers, farmers, and non-MSMEs are also important to the supply of inputs. Manufacturing enterprises and MSMEs also source for inputs from direct imports (4.5%) and government (10.2%). Disruptions in the external source markets, therefore, have adverse implications to both firms in manufacturing and MSME operations in Nairobi City County.

Figure 5.8: Source of material inputs



Source: KNBS (2016)

Level of innovation by firms in manufacturing

Manufacturing establishments in Nairobi City County were involved in both product, process and market innovations. More product and market innovations are seen under the micro category at 7.7 per cent and 5.2 per cent, respectively, while process at 6.5 per cent under the small sized category. Fewer innovations are observed in the medium category at a rate of 1.2 per cent for product and 0.8 per cent for process and market innovations, respectively (Table 5.3).

Table 5.3: Level of innovation by firms in Manufacturing

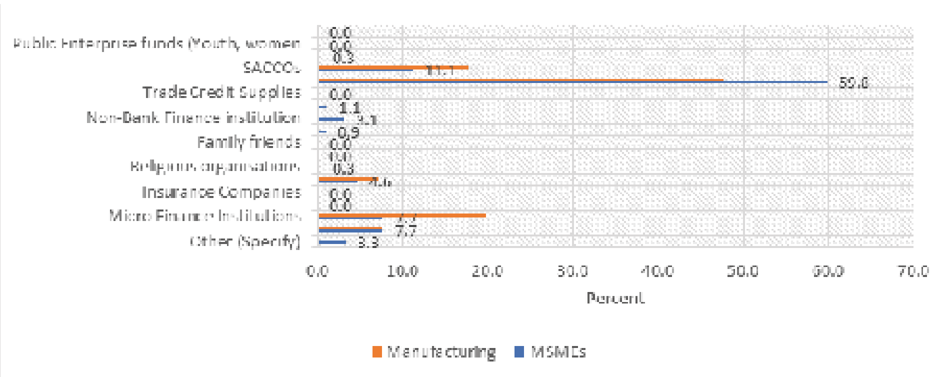
Type of innovation	Micro			Small		Medium		Large		Total
	Don't know	No	Yes	No	Yes	No	Yes	No	Yes	
Product	0 (0)	16,633 (70)	1,839 (7.7)	1,750 (7.4)	1,419 (6)	342 (1.4)	280 (1.2)	565 (2.4)	942 (4)	23,770 (100)
Process	0 (0)	17,657 (74.3)	815 (3.4)	1,624 (6.8)	1,545 (6.5)	433 (1.8)	188 (0.8)	942 (4)	565 (2.4)	23,770 (100)
Market	0 (0)	17,236 (72.5)	1,236 (5.2)	2,240 (9.4)	930 (3.9)	433 (1.8)	188 (0.8)	565 (2.4)	942 (4)	23,770 (100)

Source: KNBS (2016)

Access to credit for manufacturing and MSMEs firms

According to the MSME 2016 survey, 72.8 per cent of MSMEs and 64.6 per cent of those in manufacturing applied for credit. Manufacturing firms mainly get their credit from commercial banks (47.7%), MFIs (19.7%), SACCOs (17.9%), self help groups (7.2%), among others. MSMEs source their financing from commercial banks (59.8%), SACCOs (11.1%), MFIs (7.7%), public financing agencies and cooperatives (7.7%) (Figure 5.9).

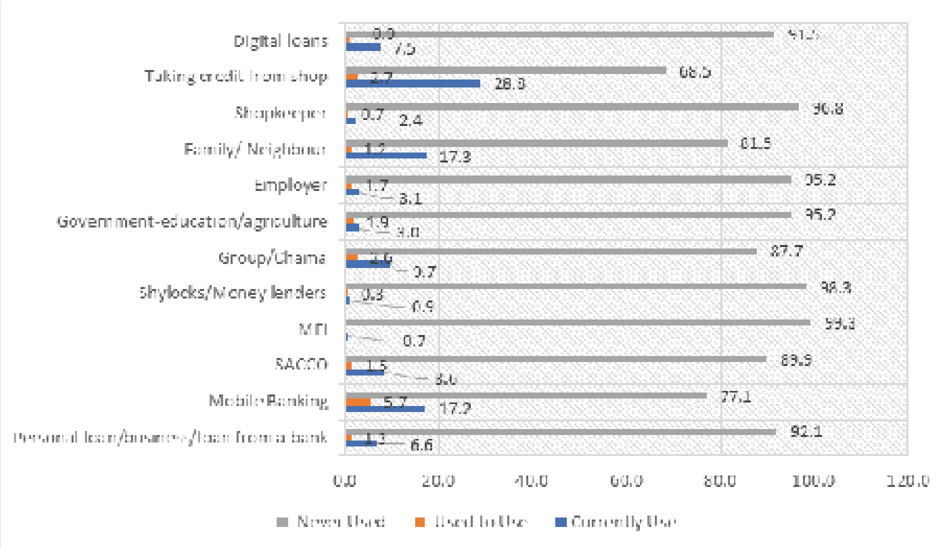
Figure 5.9: Sources of finance



Source: KNBS (2016)

Recent evidence from FinAcess 2019 provides further insights on sources of credit for businesses in Nairobi City County. Businesses commonly obtain credit from the conventional sources such as shops (28.8%), family/neighbour (17.3%), groups/chama (9.7%), SACCOs (8.6%), personal/business loans from banks (6.6%), employer (3.1%), government (3%), obtaining goods in kind from shopkeepers (2.4%), shylocks (0.8%) and MFI (0.7%). Emerging sources of credit for businesses in Nairobi City County include mobile money (17.2%) and digital loans (7.5%) (Figure 5.10).

Figure 5.10: Recent sources of credit

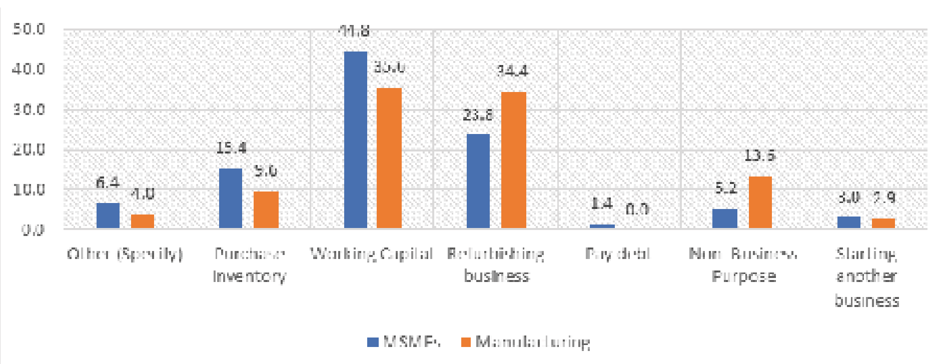


Source: FinAcess (2019)

Purpose of credit

Figure 5.11 shows the main purpose for credit for both manufacturing enterprises and MSMEs in Nairobi City County. Manufacturing firms require credit for working capital (35.6%), refurbishing business (34.4%), non-business purposes (13.6%), purchasing inventory (9.6%), among others. MSMEs require credit for working capital (44.8%), refurbishing business (23.8%), and purchasing inventory (15.4%).

Figure 5.11: Main purpose of credit

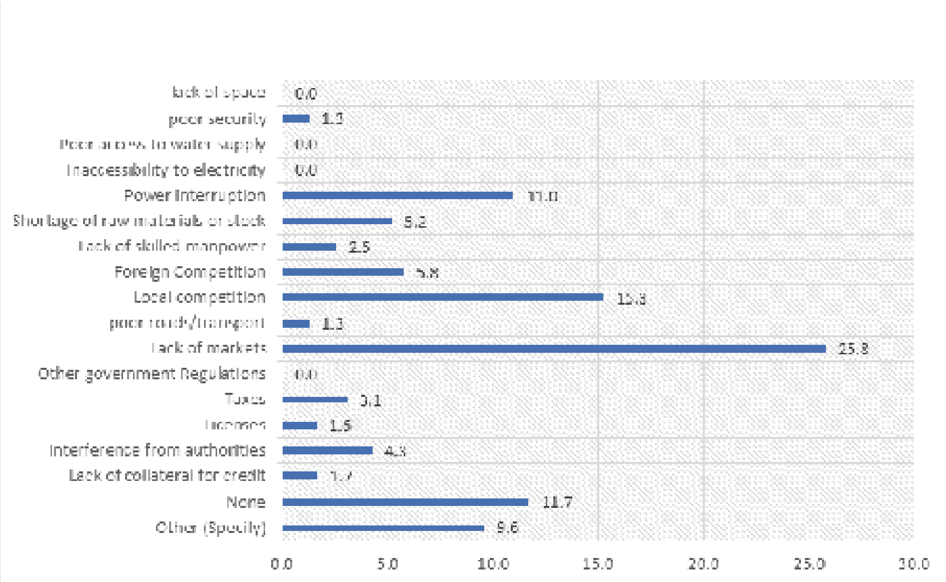


Source: KNBS (2016)

Constraints faced by manufacturing firms

The main constraints faced by manufacturing firms in Nairobi City County include lack of markets (25.8%), local competition (15.3%), power interruption (11%), foreign competition (5.8%), shortage of raw materials or stock (5.2%), and interference from authorities (4.3%) (Figure 5.12).

Figure 5.12: Constraints faced by manufacturing firms



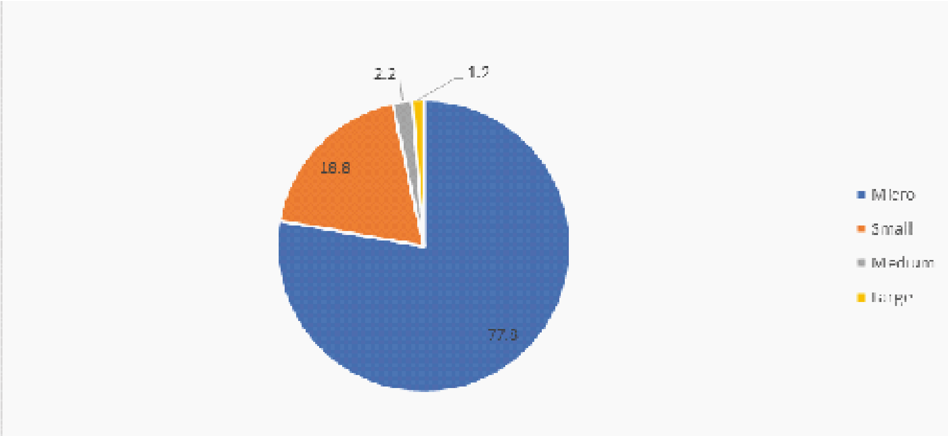
Source: KNBS (2016)

b) Micro, Small and Medium Enterprises (MSMEs)

Nairobi City County has 351,414 establishments[4] with 273,454 (77.8%) being micro, 65,974 (18.8%) are small, 7,596 (2.2%) are medium, and 4,390 (1.2%) are large enterprises (KNBS, 2016) (Figure 5.13).

4 After applying weights.

Figure 5.13: Distribution of MSMEs by size

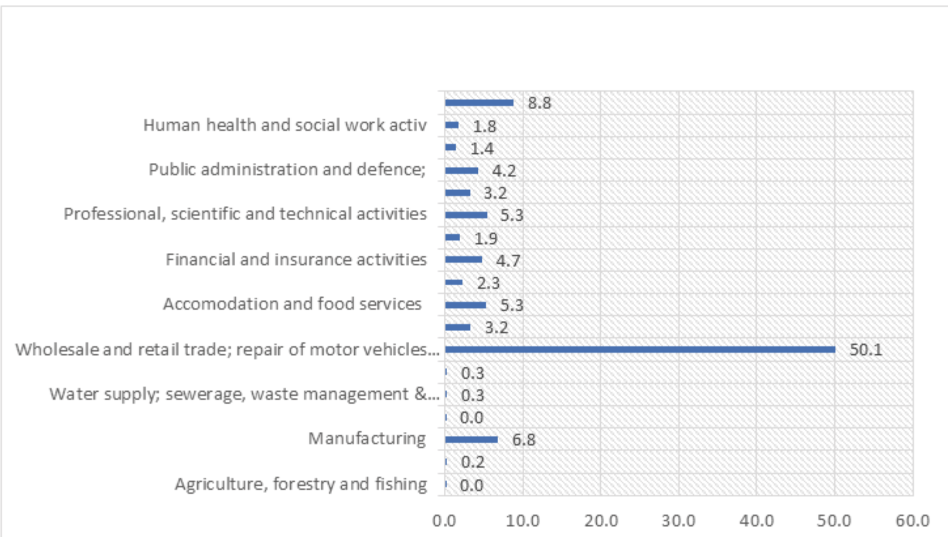


Source: KNBS (2016)

Sector of operation by MSMEs

Most of MSMEs in Nairobi City County operate in wholesale and retail trade, repair of motor vehicles and motorcycles (50.1%); arts, entertainment and recreation (8.8%); manufacturing (6.8%); accommodation and food services (5.3%); and professional, scientific and technical activities (5.3%) (Figure 5.14). Ideally, these are the sectors that have been affected most by the pandemic and need focus in achieving re-engineering and recovery.

Figure 5.14: Sector of operation by MSMEs

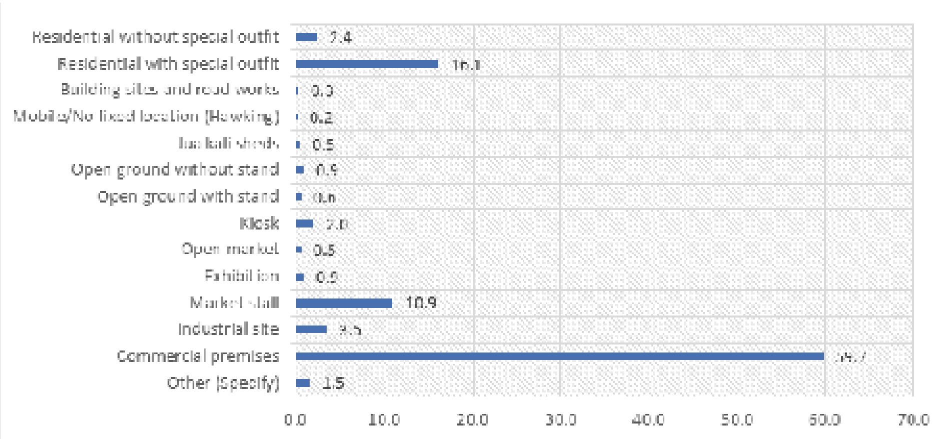


Source: KNBS (2016)

Location of the businesses by type of premises

Most MSMEs in Nairobi City County are in commercial premises (59.7%), residential with special outfit (16.1%), market stall (10.9%), market stall (3.5%), and residential without special outfit (2.4%) (Figure 5.15).

Figure 5.15: Location of businesses by premises



Source: KNBS (2016)

Distribution of MSMEs by gender and size

Table 5.4 shows the distribution of MSMEs in Nairobi City County by gender: 44.2 per cent are male-owned, 27.6 per cent are female-owned, while 29.2 per cent are jointly owned (male/female). For micro establishments, 43.9 per cent are male-owned, 32.3 per cent are female-owned, while 23.7 per cent are jointly owned. Joint owners dominate small sized establishments at 49.2 per cent, while male and female are 38.5 per cent and 12.3 per cent, respectively. Considering medium sized establishments, ownership is either joint (53.9%) or controlled by males (46.1%). Large sized establishments are dominantly owned jointly (74.4%) while male and female owners are 8.3 per cent and 17.3 per cent, respectively.

Table 5.4: Distribution of MSMEs by gender and size -N (%)

Gender	A11	Micro	Small	Medium	Large
Male	151,943 (43.2)	120,182 (43.9)	25,380 (38.5)	3,503 (46.1)	490 (8.3)
Female	96,976 (27.6)	88,384 (32.3)	8,102 (12.3)	0 (0)	1,020 (17.3)
Joint	102,495 (29.2)	64,889 (23.7)	32,492 (49.2)	4,093 (53.9)	4,390 (74.4)
Total	351,414 (100)	273,454 (100)	65,974 (100)	7,596 (100)	5,900 (100)

Source: KNBS (2016)

In terms of employment, the small-sized establishments employ more people (32.7%) compared to micro (25.9%), medium (14.1%) and large (27.4%) (Table 5.5). Micro firms employ 13.4 per cent male and 12.5 per cent female and small sized employ 19.2 per cent male and 13.5 per cent female. Equally, more men are employed among medium establishments at 10.3 per cent while females include 3.8 per cent. For large sized establishments, 17.1 per cent of males and 10.3 per cent are employed, respectively. Overall, more men (59.9%) are employed by MSMEs in Nairobi City County than women (40.1%).

Table 5.5: Employment by gender and size - N (%)

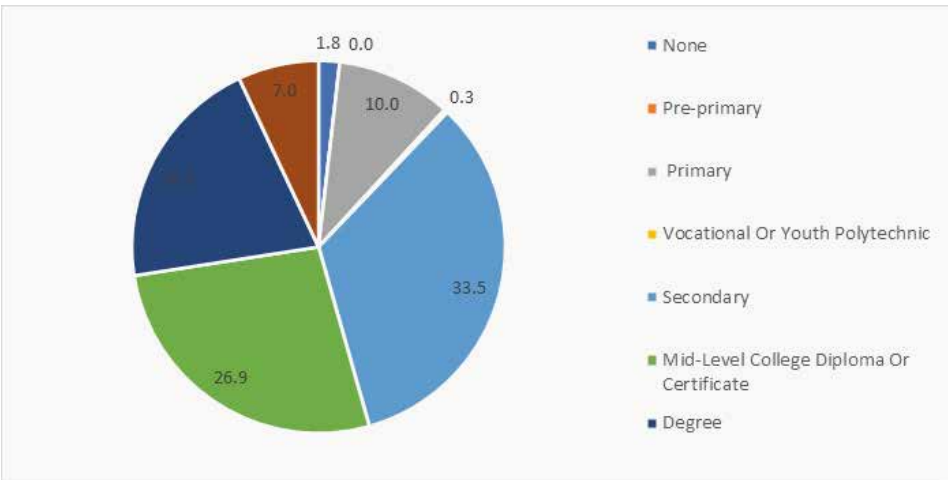
Gender	Micro	Small	Medium	Large	Total
Male	494,122 (13.4)	707,389 (19.2)	379,336 (10.3)	631,613 (17.1)	2,212,460 (59.9)
Female	461,869 (12.5)	497,993 (13.5)	139,969 (3.8)	378,804 (10.3)	1,478,636 (40.1)
Total	955,991 (25.9)	1,205,382 (32.7)	519,306 (14.1)	1,010,417 (27.4)	3,691,096 (100)

Source: KNBS (2016)

Education levels of MSME owners

Education levels of MSME owners in Nairobi City County are shown in Figure 5.16: secondary (33.5%), mid-level college diploma or certificate (26.9%), degree (20.5%), primary (10.0%), and pre-primary (7.0%) education. About 1.8 per cent of MSME owners in Nairobi City County do not have formal education.

Figure 5.16: Education levels of MSME owners



Source: KNBS (2016)

Table 5.6: Level of innovation by MSMEs

Type of Innovation	Micro				Small				Medium		Large			Total
	Refused to answer	Don't know	No	Yes	Refused to answer	Don't know	No	Yes	No	Yes	Don't know	No	Yes	
Product	301 (0.1)	2,410 (0.7)	237,979 (69)	31,082 (9)	86 (0.02)	308 (0.1)	49,191 (14.3)	5,626 (4.6)	5,626 (1.6)	1,969 (0.6)		1,751 (0.5)	2,035 (0.6)	344,807 (100)
Process	301 (0.1)	2,410 (0.7)	257,758 (74.8)	11,303 (3.3)	86 (0.02)	228 (0.1)	57,068 (16.6)	8,058 (2.3)	7,321 (2.1)	274 (0.1)	0 (0)	3,032 (0.9)	754 (0.2)	344,807 (100)
Market	301 (0.1)	2,113 (0.6)	248,073 (71.9)	21,284 (6.2)	86 (0.02)	148 (0.0)	53,951 (15.6)	11,255 (3.3)	5,324 (1.5)	2,272 (0.7)		1,510 (0.4)	2,276 (0.7)	344,807 (100)

Source: KNBS (2016)

Level of innovation by MSMEs

Table 5.6 presents the levels of innovation in Nairobi City County by MSMEs according to size. Overall, there were low levels of innovation across MSMEs, with 9 per cent involved in product, 3.3 per cent in process, and 6.2 per cent in market innovation for micro-sized enterprises. Regarding small-sized enterprises, 4.6 per cent engaged in product, and 2.3 per cent process and 3.3 per cent in market innovation innovations, respectively. For medium-sized establishments, 0.6 per cent were involved in product, 0.1 per cent process while 0.7 per cent were involved in market innovations. A similar trend is noted among large-sized establishments, with 0.6 per cent in product, 0.2 per cent in process and 0.7 per cent in market innovations.

E-commerce

Participation in e-commerce by households in Nairobi City County is above the national average. About 14 per cent of the households participate in online e-commerce, which is above a national average of 4.3 per cent (KPHC, 2019). In comparison, men participate more in online e-commerce (15.1%) than women (13.0%). With introduction of stay-at-home protocols due to COVID-19 online trade has been expected to thrive, more impact will be felt in Nairobi City County since more households participate in the same.

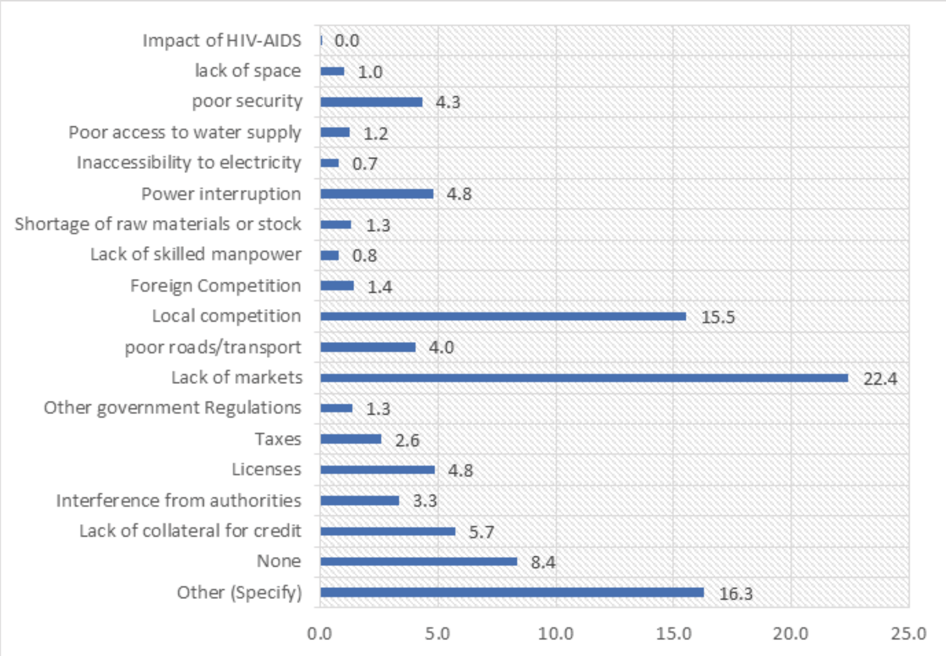
Turnover tax

Only 30.5 per cent of MSMEs in Nairobi City County (107,220) had a previous monthly turnover of above Ksh 83,333, which translates to Ksh 1 million a year. Ideally, this would be the establishments that are eligible for turnover tax, with new thresholds recently introduced vide the tax laws (Amendment) Act, 2020. The actual impact of this move may be difficult to estimate due to data challenges on actual revenue streams and the number of establishments that comply with the same.

Constraints faced by MSMEs

The main constraints faced by MSMEs in the City County include lack of markets (22.4%), local competition (15.5%), lack of collateral for credit (5.7%), power interruption (4.8%), licenses (4.8%), poor security (4.3%), and poor roads/ transport (4.0%) (Figure 5.17).

Figure 5.17: Main constraints faced by MSMEs



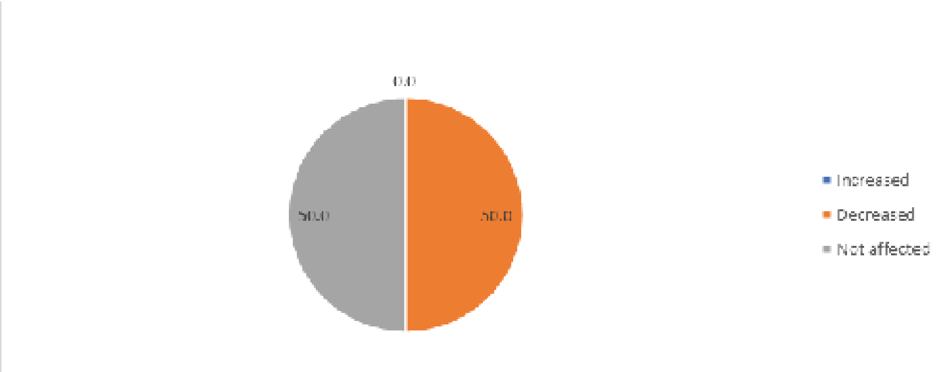
Source: KNBS (2016)

A study on County Business Environment for MSEs (CBEM) identified other constraints faced by MSMEs in Nairobi City County as: financial and technical capacity, market environment, and worksite and related infrastructure (KIPPRA, 2019). On worksites, MSEs face inadequate and unequipped worksites, lack of public toilet facilities, lack of designated areas for waste disposal, poor road infrastructure, and frequent power interruptions. On technical capacity, MSEs are characterized by low levels of innovation, lack of training and apprenticeship programme for artisans, fragmentation due to multiplicity of players who offer training and capacity building, and lack of monitoring and evaluation of training programmes. With the market environment, MSEs face inadequate market for their local products; stiff competition among themselves; and unfair trade practises which manifest through contract enforcement, counterfeiting, dumping (substandard goods) and misrepresentation (through weight, price, ingredient). MSEs also face bottlenecks related to insecurity; multiple licences and permits; numerous procedures for obtaining licenses; and shortage of raw materials.

Effects of COVID-19 on household non-farm and farm businesses

Figure 5.18 presents the effects of COVID-19 on household non-farm and farm businesses in Nairobi City County. 50 per cent of the respondents report a decrease in their business activities due to the pandemic while 50 per cent were not affected. Equally, 50 per cent of the respondents have had a decrease in their income due to COVID-19. This is an indicator that COVID-19 is already having a negative effect on the non-farm and farm businesses, even though the situation is still evolving.

Figure 5.18: Effects of COVID-19 on household non-farm and farm businesses

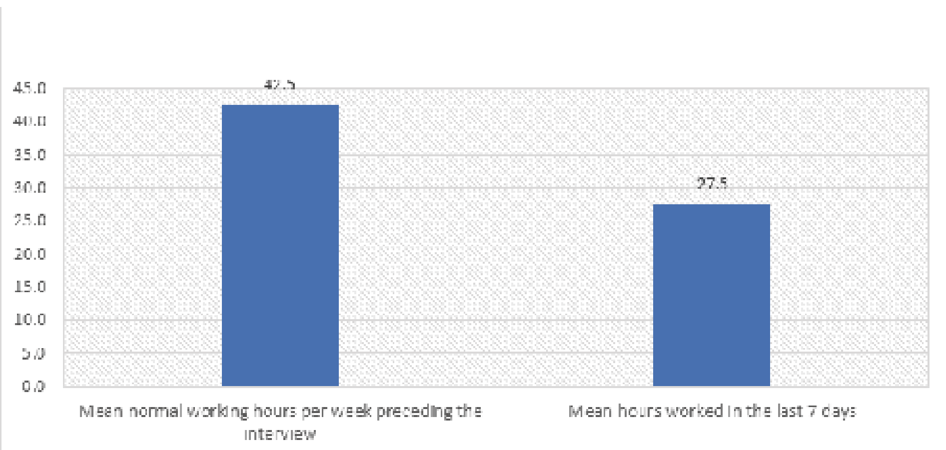


Source: KNBS COVID-19 Survey 2020 (Wave 2)

Labour dynamics

During the period considered in wave 2 data collection, respondents reported an improvement 15 hours in the mean working hours for household non-farm and farm businesses in the Nairobi City County, which implies a deterioaration in economic activities between the interview periods (Figure 5.19). This could be as a result of service and manufacturing activities, considering they significantly form the main stay of the County.

Figure 5.19: Labour dynamics on household non-farm and farm businesses



Source: KNBS COVID-19 Survey 2020 (Wave 2)

Key Messages

a) The key sectors that drive the economy of Nairobi City County include services and manufacturing. Therefore, support should be prioritized to these sectors to ensure re-engineering of the County economy.

b) The key sub-sectors that drive manufacturing in Nairobi City County include wearing apparel, food products, paper and paper products, wood and wood products, and leather and related products.

c) The main constraints faced by manufacturing firms in the City County include lack of markets, local competition, power interruption, foreign competition, shortage of raw materials or stock, and interference from authorities.

d) The main constraints faced by MSMEs in the City County include lack of markets, local competition, lack of collateral for credit, power interruption, licenses, poor security, and poor roads/transport.

e) Access to credit perennially remains a constraint to MSMEs, which hinders growth and expansion of businesses, even more so now during the pandemic. There is need to provide financial support to MSMEs that have demand, employ large number of people, and those that provide essential goods and services.

f) COVID-19 presents opportunities that could be harnessed, such as development and support of innovations to address the pandemic. These include production of essential goods such as masks, Personal Protective Equipment (PPEs), and sanitizers, disinfectants, canned foods, immunity boosting products, hospital beds and ventilators. As the pandemic subsides, a strategy is required for smooth transition.

g) Manufacturing establishments must also adopt to cope with the new guidelines that could include rearranging floor plans to allow for social distancing.

h) Training and capacity building are important in assisting MSMEs to surmount the shocks faced during the pandemic but also allow for re-emergence.

i) In terms of re-engineering, there is need to consider establishing support measures to re-vitalize and re-open businesses that collapsed during the crisis within the county.

5.2 Opportunities with COVID-19 in various sectors

The following are some of the opportunities created by COVID-19 in trade, manufacturing and the MSMEs sector:

(i) High demand for masks, Personal Protective Equipment (PPEs) and sanitizers. An opportunity to empower manufacturing firms exists.

(i) COVID-19 has increased demand for locally produced goods. It is an opportunity for industry and MSMEs development and generation of jobs for the youth.

Effects of COVID-19 on this sector

There have been both positive and negative effects of COVID-19 on this sector. These are outlined below:

(i) There has been an increased wave of innovations during the pandemic.

(ii) MSMEs have been faced with declining sales and revenues due to depressed demand and low circulation of money in the County, which is caused by loss of income by the residents.

(iii) There is a decrease in trade activities in the County due to restrictions on movements due to fear of attending physical markets, where there is fear of contracting the disease.

(iv) Businesses are faced with challenges of increased costs resulting from the need to comply with new protocols in form of provision of handwashing and sanitization points, wearing of masks even for workers, rearrangement of floor plans for social distancing especially for manufacturers, and awareness creation.

5.3 Emerging Issues

(i) There has been reduced income from traders, manufacturers and MSMEs and a corresponding decrease in taxes collected from them. This will affect implementation of Nairobi City County's planned activities due to reduced projected revenues.

(ii) There is need to identify and promote specific and emerging value chains because of COVID-19, and which Nairobi City County has comparative advantage.

(iii) Review all the ongoing interventions by the County and the national government to assess their effectiveness and especially regarding trade, manufacturing and MSMEs.

(iv) There is need for legislative amendments to ensure the Buy Kenya Build Kenya initiative is implemented at the County.

5.4 Recommendations

To support trade, manufacturing and the MSMEs sector, the County will:

(i) Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short-run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Related, the County will inject some stimulus to cushion the businesses and traders through affordable credit, waiver of some County taxes, cess, and other charges.

(ii) COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitizers, hospital beds and ventilators. It is an opportunity to spur innovation and promote manufacturing and industry development and generation of jobs for the youth.

(iii) Establishments in the county will need to adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing.

(iv) Promote the County City as an economic, industrial and diplomatic hub as planned in the third Medium-Term Plan.

(v) Collaborate and partner with the counties forming the Nairobi Metropolitan Region; that is, Kiambu, Murang'a, Machakos and Kajiado counties, to enhance economies of scale and market for industrial products.

(vi) Invest in water projects, expand roads and transport network to decongest the city and build adequate and affordable housing.

(vii) Facilitate local and foreign private investors to invest in the Special economic Zones (SEZs).

(viii) Improve power supply reliability as outlined in the MTP III, for example though investment in cheaper renewable energy.

(ix) Enhance security through continuous installation of National Security Communication Network and the Surveillance System in the City, which is a Kenya Vision 2030 flagship project.

(x) Fast-track construction of KIRDI Research, Technology and Innovation Laboratory in South B, which is supposed to support manufacturing as per MTP III.

6. Infrastructure

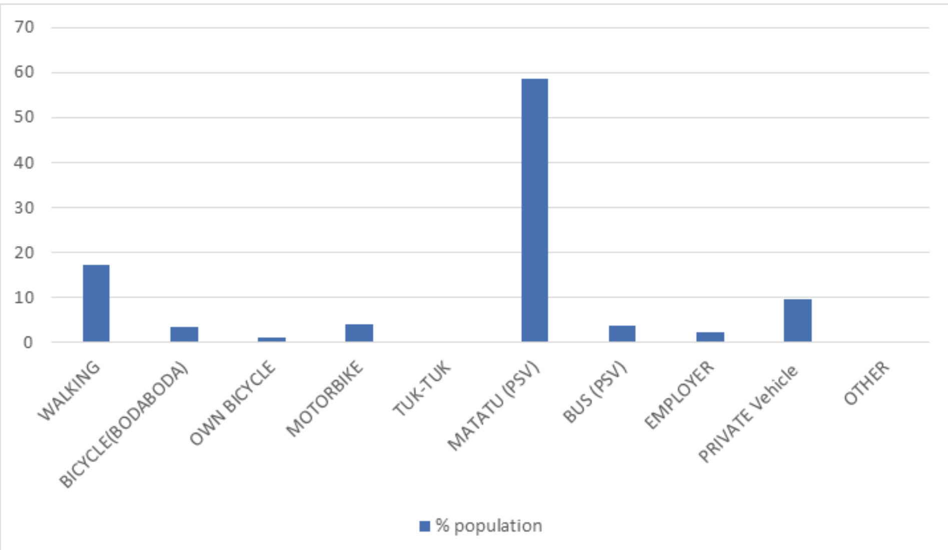
6.1 Transport Sector

In response to the COVID -19 pandemic, the County responded by delaying the implementation of some of the projects that are likely to exhaust the budget to next financial year. Some of these projects include construction of roads and Technical, Vocational, Education Training (TVET) institutions. As a result, this budget was reallocated to public health.

6.1.1 Characteristics of the sector

Majority of households own a car (12.9%), a bicycle (12.5%), and motorcycle (4.3%) (KNBS, 2019). The main means of transport used in the County is PSV matatus at 58.74 per cent, followed by walking at 17.11 per cent, private car at 9.73 per cent, motorbike 3.94 per cent and Bus (PSV) 3.68 per cent (Figure 6.1) while 90.16 per cent of the population had not changed the main means of transport (KNBS, 2020b). On average, residents travel 6.04 kilometers to their workplace at an average cost of Ksh 78.36. For those commuting to school, residents spend on average Ksh 3,490.76 (KIHBS, 2015/16).

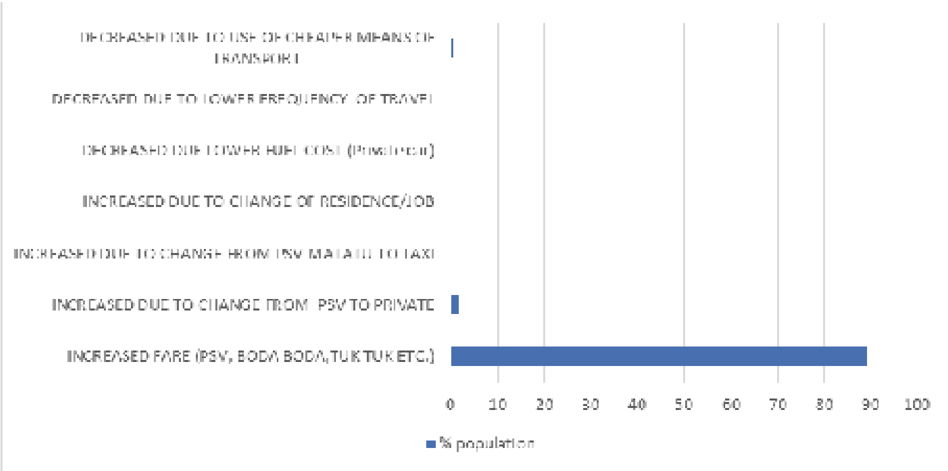
Figure 6.1: Main means of transport



Source: KNBS COVID-19 Impact Survey 2020

The KNBS COVID-19 Impact Survey 2020 revealed that 68.48 per cent of the population reported a change in the cost of travel/commute (Figure 6.2). The expenditure on transport increased by 49.23 per cent from Ksh 65 before February 2020 to Ksh 97 in May 2020 for a one-way trip. The main change (89.08%) in transport cost was attributed to increased fares for PSV, *Boda Boda and Tuk Tuk*.

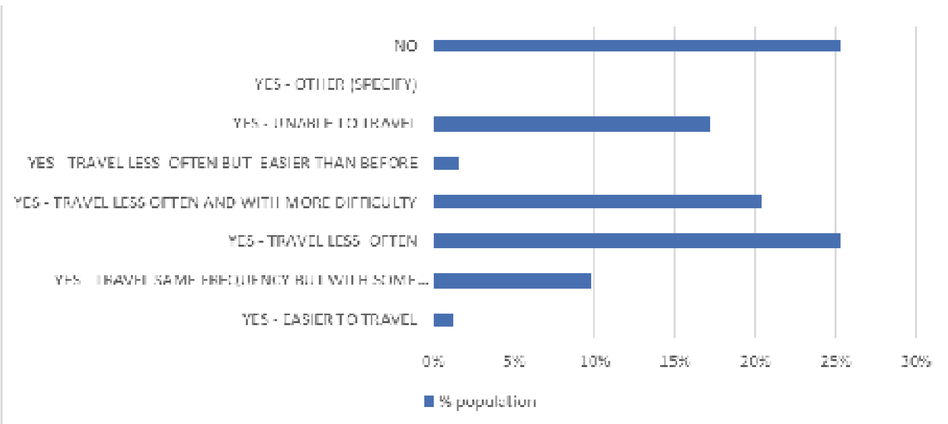
Figure 6.2: How has the cost of your main travel changed



Source: KNBS COVID-19 Impact Survey 2020-wave 2

Residents had changed their travel patterns, with 25.36 per cent of the population traveling less often, while 9.18 per cent travelled with the same frequency but with some difficulty, and 17.17 per cent were unable to travel. However, 25.24 per cent of the population did not change their travel pattern (Figure 6.3).

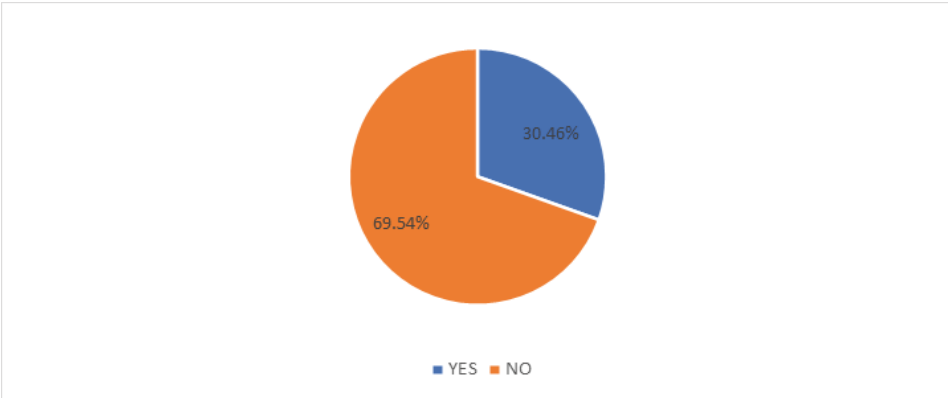
Figure 6.3: Change in travel patterns



Source: KNBS COVID-19 Impact Survey 2020-wave 2

The pandemic has affected delivery of goods and services for 30.46 per cent of households.

Figure 6.4: Has delivery of your household goods and services been affected by COVID-19



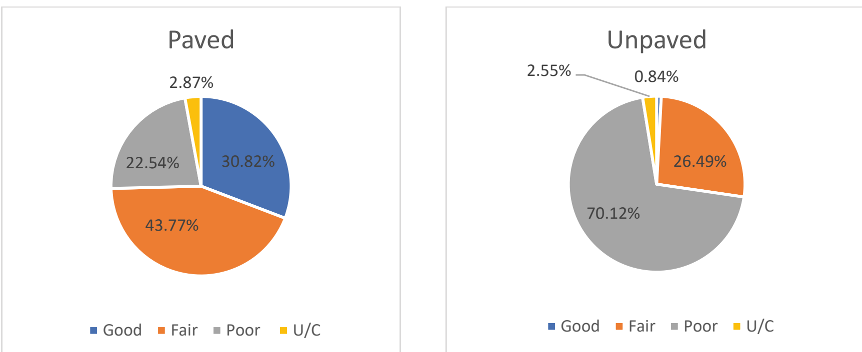
Source: KNBS COVID-19 Impact Survey 2020-wave 2

The County was allocated a total of Ksh 553,745,527 from the Road Maintenance Levy Fund towards road maintenance in 2017/18 (OCOB, 2019).

Road network

The county has a total of 4,730.68 kilometres of classified road network. The paved County road network covers 1155.15 km, while the paved national roads cover 599.9 km. Out of the total paved road network of 1755.05 km, 30.82 per cent is in good condition, 43.77 per cent in fair condition and 22.54 per cent in poor condition. The unpaved road network in the county covers 1205.11 km (county roads) and 11.04 km (national roads). Of this, 0.84 per cent is in good condition, 26.49 per cent fair and 70.12 per cent in poor condition as depicted in Figure 6.5 (KRB, 2019).

Figure 6.5: Road condition mix-classified road network



Source: KRB (2019)

The unclassified road network in the County covers 1,759.49 km, with 1,319.99 km of narrow roads; that is, road with a reserve of between 4-9 meters, while there is a total of 439.50 km of new roads.

Constraints faced

The Rural Access Index (RAI) measures the proportion of the rural population who live within 2 km of an all-season road[5]. The county has a RAI of 95 per cent, which is above the national average of 70 per cent, indicating that access to transport in rural areas is above average (KRB, 2019). This has positive implications regarding sectors that rely on accessibility such as agriculture, trade and overall development. The road condition mix of the unpaved network at 70.12 per cent is a constraint to development.

6.1.2 Opportunities with COVID-19 in various sectors

With reference to the 8-point stimulus programme by the National Government[6] and resources allocated to road development and maintenance, the County could strategically improve the road network for economic development, while creating jobs for youth, women and vulnerable groups as espoused in the Roads 2000 programme[7] on labour-based road development approaches.

The Roads 10,000 programme being implemented nationally by the Roads sub-sector actors, and specifically the Low Volume Sealed Roads (LVSR) approach[8] offers a strategic and cost-effective approach to improve rural accessibility in the County.

Residents predominantly rely on matatu PSV transport and walking; this is an opportunity during the pandemic period as this mode reduces the risk of infections that would arise from use of motorized public transport[9].

6.1.3 Emerging Issues

- Poor road conditions for unpaved network
- Reliance on PSV transport requires enforcement of COVID-19 mitigation measures

6.1.4 Recommendations

(i) Develop a public transport master plan in collaboration with the Nairobi Area Metropolitan Authority (NAMATA) and Nairobi Metropolitan Services (NMS) office for integrated multi-modal transport systems.

5 RAI defined: https://datacatalog.worldbank.org/dataset/rural-access-index-rai

6 Government of Kenya eight (8) point stimulus programme https://www.president.go.ke/2020/05/23/the-seventh-presidential-address-on-the-coronavirus-pandemic-the-8-point-economic-stimulus-programme-saturday-23rd-may-2020/

7 Roads 2000 programme http://krb.go.ke/our-downloads/roads%202000%20strategic%20plan.pdf

8 LVSR /Roads 10,000 programme https://www.kerra.go.ke/index.php/lvsr

9 Non-Motorized Transport strategy https://www.weforum.org/agenda/2020/05/cities-support-people-walking-and-cycling-work/

(ii) Improve and expand infrastructure for Non-Motorized Transport (NMT) in urban areas and along roads with heavy high-speed traffic to promote sustainable mobility options and enhance road safety for all road users. This is in line with the Integrated National Transport Policy 2009 and the Sustainable Development Goals[10].

(iii) Integrate NMT infrastructure with public transport and commuter rail transport systems to respond to the modal split in the new normal.

(iv) Collaborate with transport sector stakeholders to register transport operators into formal organizations to enable future County Government support and funding during times of emergency.

(v) Sensitize PSV and *boda boda and tuk tuk* operators on COVID-19 prevention measures and assist vehicle owners in retrofitting vehicle designs for social distance, hygiene and ventilation.

(vi) Expand the county capability for telecommuting and teleworking and develop relevant policies in support of the same.

(vii) Re-develop bus parks and termini to address crowding and social distancing concerns stipulated in the public health guidelines.

(viii) Focus on increasing the share of unpaved roads in good and fair condition to above 62.0 per cent, which is the national average. For the unpaved road network, focus on adopting the Low Volume Sealed Roads (LVSR) technology for greater network coverage cost effectively.

(ix) Apply labour-based and local resource-based approaches for road development and maintenance, where technically and economically feasible, in line with the Roads 2000 national policy[11].

(x) Adopt climate smart road engineering designs to safeguard road and bridge infrastructure from floods and to harvest storm water for irrigation and productive use. Use the Kenya Urban Support Programme funding to build storm water management systems in urban areas.

6.2 Information and Communication Technology

The County has been expanding especially using e-platform and IFMIS. However, some of these projects have slowed down because of low connectivity but, overall, they have improved in ICT. The County can now hold meetings using ICT. The County has also improved its ICT software and communication platforms; for example, it is making use of Zoom and WhatsApp applications. One overall challenge is delay in ICT infrastructure such as IFMIS and OSR application; the budget was reallocated to COVID-19-related issues.

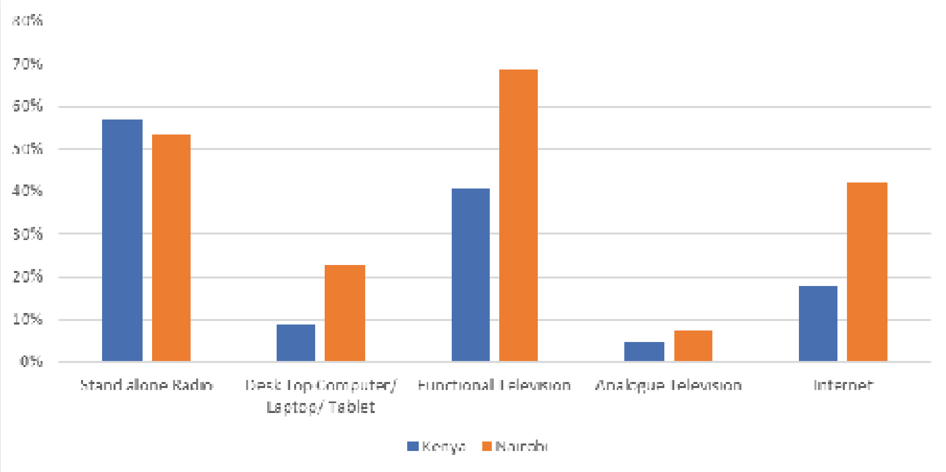
10 Sustainable Mobility for All: https://sum4all.org/implementing-sdgs

11 Roads 2000 programme http://krb.go.ke/our-downloads/roads%202000%20strategic%20plan.pdf.

6.2.1 Characteristics of the sector

The analysis of the 2019 KPHC reveals that only 42.1 per cent of the conventional households in the county 'own' Internet with 22.7 per cent owning a desktop, computer laptop or tablet. Internet access, ICT device ownership and TV ownership is particularly critical not only for access of COVID-19 information, but as well as supporting remote learning by pupils, and remote working (Figure 6.6).

Figure 6.6: Percentage distribution of conventional households by ownership of ICT assets KPHC 2019

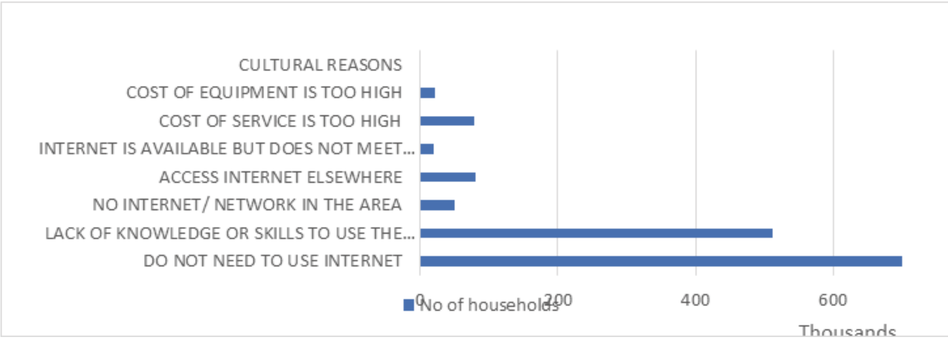


Source: KNBS (2019), Kenya Population and Housing Census 2019

Online shopping is not prevalent in the County. 14.0 per cent of the conventional households searched and bought goods/services online. There exists gender disparity in online shopping, with more men (15.1%) than women (13.0%) undertaking online shopping.

The perception that the individual does not need to use the internet, lack of knowledge and skills on internet are the leading reasons that the people of in the County do not have Internet connection (KHIBS). Other key factors include lack of Internet/network in the area, and high cost of service and equipment (Figure 6.7).

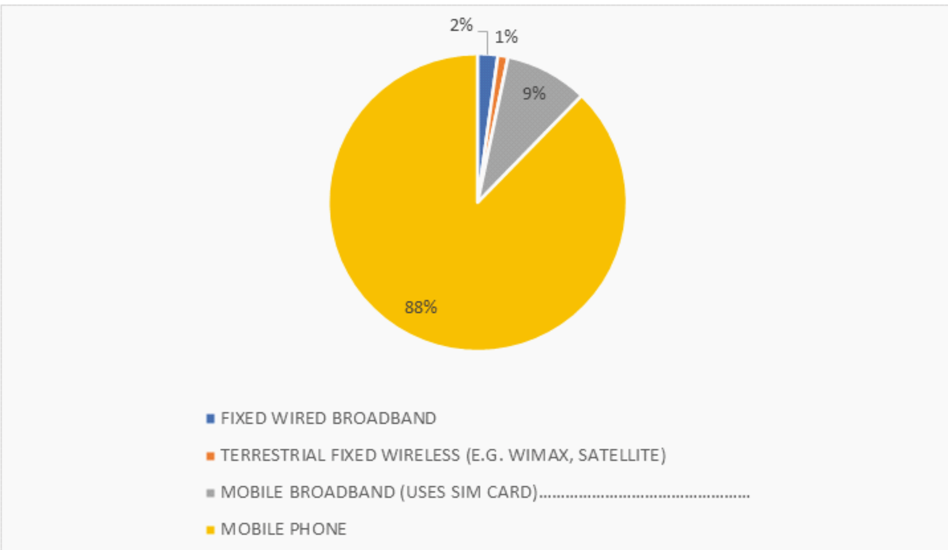
Figure 6.7: Why doesn't this household have any type of Internet connection



Source: KNBS (2016), KIHBS 2015/2016

Approximately 88 per cent of the Internet users in the county rely on mobile phone for connectivity, with a marginal population of 9 per cent relying on mobile broad band that uses a sim card for connectivity.

Figure 6.8: Type of Internet connection

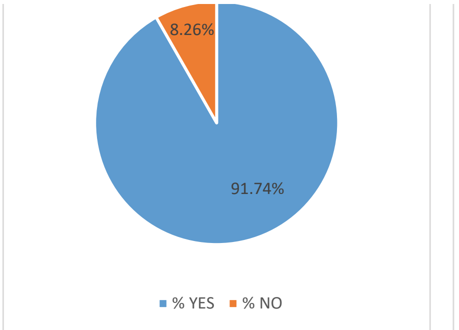


Source: KNBS (2016), KIHBS 2015/2016

Approximately 69.1 per cent of the population aged 3 years and above own a mobile phone, which is higher than the national average of 47.3 per cent.

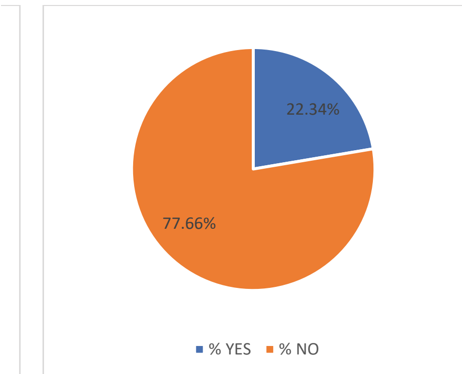
Approximately 91.74 per cent of the people in the county have a mobile money subscription compared with only 22.34 per cent that have a mobile money banking platform subscription (KHIBS 2015/16).

Figure 6.9: Mobile money transfer subscription, KHIBS 2015/16



Source: KNBS (2016), KIHBS 2015/2016

Figure 6.10: Mobile money banking platform subscription, KHIBS 2015/16



Source: KNBS (2016), KIHBS 2015/2016

The County experiences gender divide in use of Internet and ICT devices and mobile money subscriptions. Both Internet and ICT device use is higher among the male with 55.3 per cent of the men and 49.5 per cent of the women using Internet, while 30.8 per cent of the men and 25.3 per cent of the women using Desktop/Laptop/ Tablet devices (KPHC, 2019). While the usage is below the national averages, the County recorded a similar gender disparity with the national averages in Internet and ICT usage.

6.2.2 Opportunities with COVID-19 in various sectors

Mobile phone ownership is high, and this can be used strategically to connect households to the internet for business continuity.

6.2.3 Emerging issues

Online shopping is not prevalent in the County.

6.2.4 Recommendations

i) Collaborate with National Government and private sector to harness the power of technology to transform the county into a vibrant digital economy.

ii) Support programmes in partnership with the private sector that will enable households acquire ICT assets such as smart phones and laptops and increase mobile phone ownership from the low of 69.1 per cent to 100.0 per cent in line with the global agenda for Universal Access to Mobile Telephony[12]

iii) Collaborate with IT personnel in universities to support the development of ICT competence and skills among the public and bolster a digital economy.

iv) Improve the laws and regulations related to information infrastructure, establish standards for the construction of information infrastructure integrated with road, water and electricity infrastructure planning and development, especially for terrestrial IT infrastructure.

v) Negotiate with the public primary schools for community access to ICT infrastructure and collaboratively build and equip youth empowerment, ICT centres and ICT laboratories as provided in the CIDP.

vi) Enhance internet connectivity to public buildings and key trade centres to boost e-commerce, especially for MSMEs in trade and business. The NOFBI programme can be expanded to the sub-county administrative units to further enable deployment of e-governance solutions.

vii) Make ICT a standalone sector for planning and budget allocation. This is aimed at giving strategic prominence to planning, budgeting and investment in ICT.

viii) Review and implement ICT policies and procedures to manage ICT and mitigate cyber threats, disasters, and pandemics. Collaborate with the national Computer Incident Response Team (CIRT) and the Communications Authority (CA) towards managing cyber threats. This is because enhanced use of ICT is known to raise threats and risks related to cyber-crime and misinformation.

12 Universal access to mobile telephony: http://www.itu.int/itunews/manager/display.asp?lang=en &year=2007&issue=07&ipage=universal-telephony

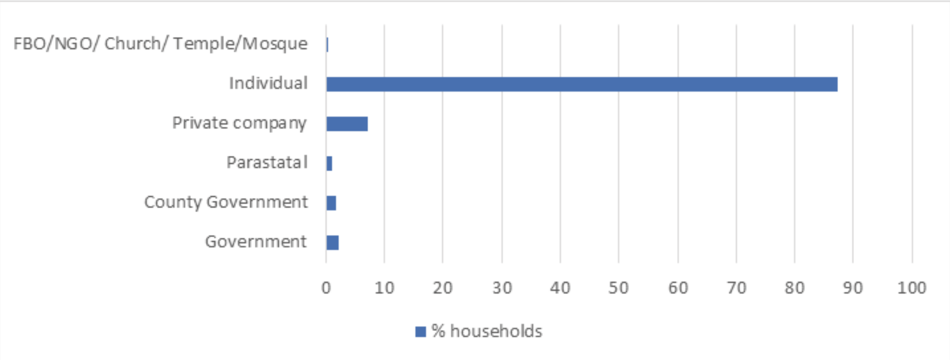
7. Urban Development

The County is mainly urban in nature with a total population of 49.9 per cent males and 50.5 per cent females. The urban land area covers 704 km with a population density of 6,247 persons per sq.km

7.1 Characteristics of the Sector

The housing tenure is predominantly owner occupied at 9.3 per cent, with 90.6 per cent of the households under rental tenure. Individuals are the primary providers of rental housing at 87.4 per cent, followed by Private Companies (7.2%), and National Government (2.1%). For those who own homes, 53.7 per cent constructed the houses while 30.8 per cent purchased the house and 15.5 per cent inherited their homes (KNBS, 2019).

Figure 7.1:Distribution of households renting/provided with the main dwelling unit by provider



Source: KNBS (2019), Kenya Population and Housing Census, 2019

Majority of households are headed by men (73.64%) compared to women (26.36%) in the County (KIHBS, 2015/16).

Housing quality

On average, the main dwellings of houses in the County have 1.68 habitable rooms against an average household size of 4.23 persons in a household, translating to approximately 2.52 people per room. According to the UN-Habitat, overcrowding occurs when there are more than three people per room.[13] In terms of housing quality (building material), 95.52 per cent of houses are constructed using finished

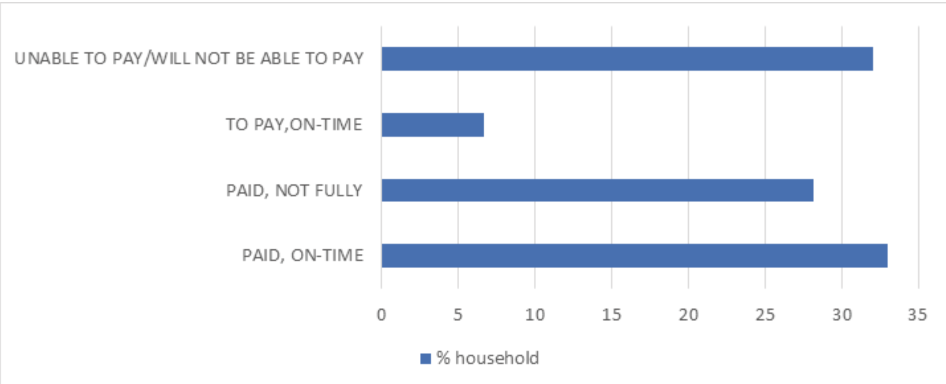
13 Household crowding measure: https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/#:~:text=Overcrowding%20occurs%20if%20there%20are,per%20habitable%20room%20(88).&text=Crowding%20occurs%20if%20there%20is,%2Drooms)%20(89).

materials for walls, floor and roofing compared to 4.48 per cent constructed using rudimentary materials (KIHBS, 2015/16). Majority of households (51.3%) have iron sheets for roofing, concrete/concrete blocks/precast walls (40.3%) and concrete/cement/terrazo floors (62.5%) (KNBS, 2019).

Rent payment

On average, rental households spend approximately Ksh 7536 on rent, with a minimum of Ksh 300 and the maximum of Ksh 15000 (KNBS, 2020b). The county recorded a rent to income ratio of 21.52 per cent which is within the acceptable threshold of 30 per cent (KNBS, 2012/13).

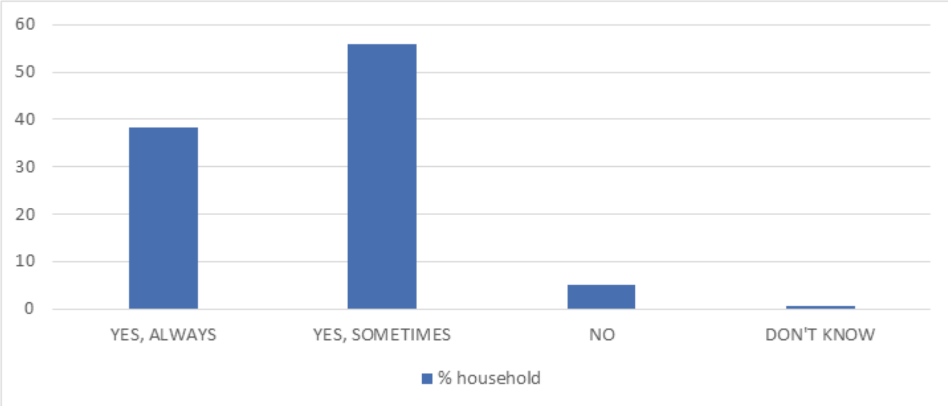
Figure 7.2: Has your household paid the rent for April 2020 on the agreed date



Source: KNBS COVID-19 Impact Survey 2020-wave 2

With the advent of COVID-19 pandemic, households' ability to pay rent has been affected, with 32.04 per cent of the population indicating inability to pay rent on the agreed date for April 2020 (Figure 7.2) compared to 33.04 per cent of the population that were able to pay rent on the agreed date and 38.41 per cent who paid rent on agreed date before COVID-19 pandemic (Figure 7.3).

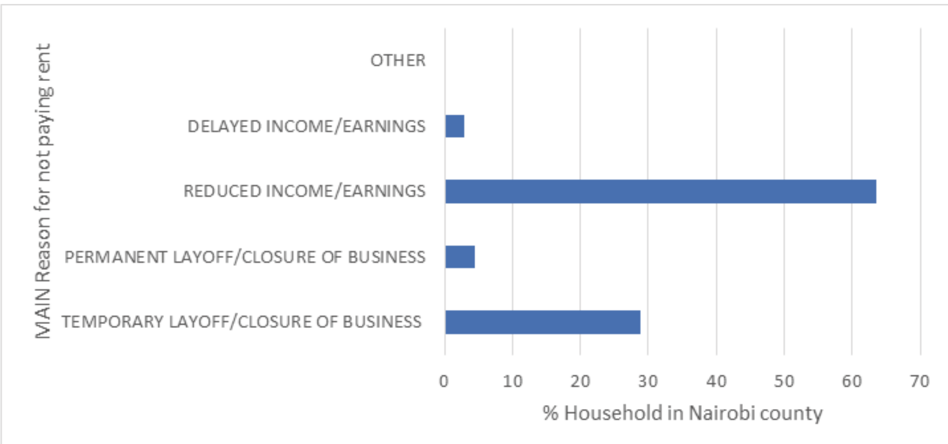
Figure 7.3: Was the household paying rent on the agreed date with the landlord before COVID-19



Source: KNBS COVID-19 Impact Survey 2020 wave 2

The main reason that has made households unable to pay rent was attributed to reduced incomes/earnings, reported by 63.54 per cent of the population. The inability to pay rent was attributed to the COVID-19 pandemic by 96.59 per cent of the population.

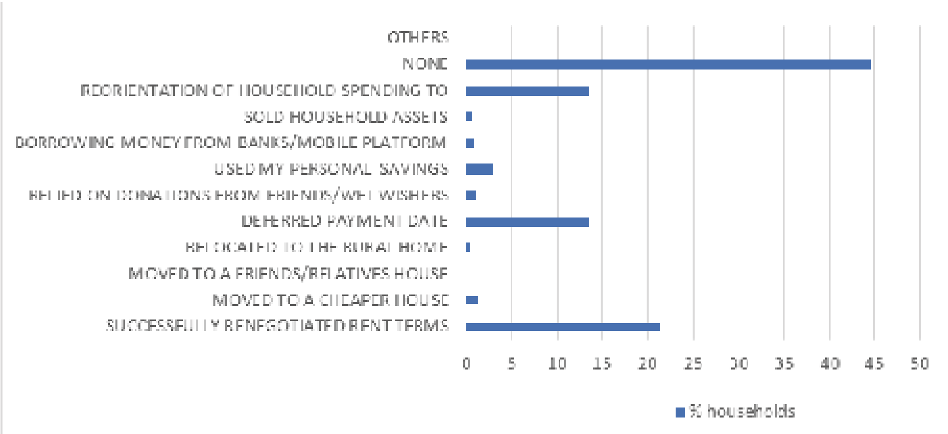
Figure 7.4: What is the main reason that has made your household unable to pay rent?



Source: KNBS COVID-19 Impact Survey 2020 wave 2

Majority of the households (75.64%) did not receive a waiver or relief on payment of rent from the landlord, with 3.92 per cent reporting a partial waiver and 0.31 per cent reporting a full waiver. To overcome the effects of Coronavirus on payment on rent, 21.23 per cent of households renegotiated rent terms, while 44.65 per cent of households did not take any measures. Approximately 1.07 per cent used personal savings to pay rent (Figure 7.5).

Figure 7.5: What measures has your household taken to overcome the effects of COVID-19



Source: KNBS COVID-19 Impact Survey 2020 wave 2

Regarding primary energy source for cooking, 29.9 per cent of households rely on unclean sources of energy for cooking such as firewood, paraffin and charcoal, which could adversely affect respiratory health of women and children.

7.2 Opportunities with COVID-19 in Urban Development

Benefits from the "Big Four" Agenda on affordable housing and investment partnership with the private sector to provide housing.

7.3 Emerging Issues

Majority, 90.6 per cent of the households, are under rental tenure and did not receive a waiver or relief on payment of rent from the landlord when distressed because of the pandemic.

7.4 Recommendations

(i) Incorporate and implement the smart cities and smart planning concepts in the Nairobi Integrated Urban Development Plan (NIUPLAN) 2014-2030, to ensure continued services delivery and efficiency in service provision during emergencies and adopt technology-driven urban planning. Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System to be used during pandemic and disaster surveillance and emergency response.

(ii) Adopt and promote ex-ante investments in human settlement planning to build resilience against pandemics and other emergencies and promote proactive risk-based, all hazards and all-of-society approaches in disaster risk reduction.

(iii) Adopt programmes aimed at an increasing household access to clean energy sources and technologies for cooking to mitigate against exposure to respiratory diseases.

(iv) Develop a policy to promote home ownership to address the problem of rent distress during times of emergency.

(v) Create a fund to cushion landlords and tenants from rent distress during periods of emergency.

(vi) Fast-track implementation of the affordable housing programme in partnership with the private sector targeting urban centres. Upgrade informal settlements by providing basic infrastructure such as roads, water and sanitation and electricity.

(vii) Collaborate with the counties of Kiambu, Murang'a, Kajiado and Machakos to plan and jointly invest in developing the Nairobi Metropolitan Region in line with the Nairobi Metro 2030 Strategy.[14]

(viii) Avail appropriate building technology for use by the public in house construction and improvement in every sub-county, which responds to local cultural and environmental circumstances.

(ix) Develop and implement urban planning and design instruments that support sustainable management and use of natural resources and land in line with the New Urban Agenda and as a mitigative measure to future pandemics and disasters.

14 Nairobi Metro 2030 Strategy: https://www.namsip.go.ke/wp-content/uploads/2018/05/Metro2030_Strategy.pdf

8. Tourism

8.1 Characteristics of the Sector

Nairobi City County is a major centre of tourism in the region. Its relative proximity to many tourist attractions both in Kenya and East Africa makes it an asset of great importance in the tourism sector. As the capital city and commercial centre, it attracts many business and leisure tourists through the Jomo Kenyatta International Airport (JKIA), the main point of entry to Kenya by air. Its main tourist attractions are Nairobi National Park; Nairobi Safari Walk; Nairobi Mini Orphanage; Nairobi National Museum, which houses a large collection of artefacts portraying Kenya's rich heritage through history, nature, culture, and contemporary art; the Nairobi Gallery; and the Nairobi Snake Park.

Nairobi City County has several world class hotels and restaurants together with excellent Meetings, Exhibitions, Conferences and Exhibitions (M.I.C.E) facilities. There exists eight (8) 5-star hotels and eight (80 4-star hotels with a combined bed capacity of 5,700 beds, five (5) 3-star hotels, six 96) 2-star hotels and 122 unclassified hotels. It is also home to the largest ice-skating rink in East Africa at the Panari Hotel's Sky Centre covering 15,000 square feet and accommodating 200 people. Bed occupancy within the high-class hotels within the County has been growing at an average rate of 9.7 per cent with the occupancy averaging 90.0 per cent. Accommodation and food services contribute 1.3 per cent to total GCP.

In terms of linkage with other sectors, the County is well linked with other tourist attraction sites in the country by road, air and rail. The Standard Gauge Railway (SGR) connects Nairobi with Mombasa tourism hub, and with Naivasha M.I.C.E hub. Nairobi's largest M.I.C.E venue, the Kenyatta International Convention Centre (KICC), can hold a maximum of 5,000 participants. There is need to expand this capacity (such through the proposed Bomas International Convention Centre) to open the county to hold larger international conferences.

8.2 Opportunities with COVID-19 in the Tourism Sector

- Improving sanitation aspects in tourism attraction sites.
- Refurbishment of accommodation facilities.
- Promoting domestic tourism.

8.3 Emerging Issues

Sanitation as a key component in ensuring business continuity in the tourism sub-sector.

8.4 Recommendations

The following strategies are proposed for re-engineering of the tourism sector in the county:

(i) Promote domestic tourism to cushion the sector from global shocks such as pandemics and other disruption to international travel.

(ii) Diversification and marketing of tourist product offering; come up with the Nairobi annual cultural festival.

(iii) Improvement of hygiene standards in the tourist hotels and attraction sites; improvement on the sanitation aspects especially during the COVID-19 era whereby tourists will be seeking for touristic experiences that assure them of health and safety.

(iv) Refurbishment of other tourist accommodation facilities to achieve star-rating requirements.

(v) Enforcement of existing laws regarding pollution and natural resource management; promote usage of 'green' energy such as solar power in tourism establishments.

(vi) Enhanced energy and ICT infrastructure development; establishment of county tourism online information portal.

(vii) Improvement of tourism-supporting infrastructure: leverage on the proposed Nairobi Bus Rapid Transport (BRT) and Nairobi Commuter Rail to promote urban tourism.

(viii) Construction of the proposed Bomas International Convention Centre to popularize M.I.C.E tourism in the County.

9. Health

9.1 Characteristics of the Sector

General health provision in the County

The County has a total of 681 health facilities in 2017, with only 115 being owned by the public thus translating to 17.0 per cent and 83.0 per cent owned by private sector. There are 4 county referral hospitals, 33 health centres, 55 dispensaries and 23 clinics. The county has 190 community health workers.

Table 9.1: Health provision

Year	2018	2019/20
Health facility density		
Primary health facilities	790	1014
Hospitals	78	104
Number of health facilities	868	1118
Health facility density	14.7	16.2
Bed density		
Hospital beds	8,707	9,631
No. of beds per 10,000 population	132	143
Human resource density		
Total workforce	5,807	22,786
Human resources for health (technical)	9,199	10,881
Number per 10,000 population	23.7	24.0

Source: Ministry of Health (2021)

In 2019/2020, the number of health facilities in the county were 1,118, which comprised of 1,014 primary health facilities and 4 hospitals. This was an improvement from a total of 868 health facilities in the previous year, 2018. The number of beds per 10,000 population is 143 against the WHO recommendation of 30 beds per 10,000 population. The health facilities and personnel serve a growing population of 4,397,073 people according 2019 census. In 2019, total health workforce was approximately 22,786, representing 24 health workers per 10,000 population which meets the WHO target of 23 health workers per 10,000.

Table 9.2: Percentage distribution of the population that reported sickness/injury by type of health provider in the county (%)

Type of Health Provider	Percentage Distribution of the Population
Government hospital	21.8
Government health centre	14.2
Government dispensary	22.5
Faith-based (church, mission) hospital/clinic	2.9
Community health	0.3
Private hospital/clinic	39.5
Nursing/maternity home	0.3
Pharmacy/chemist	0.7
Community health worker	0.7
Shop/kiosk	0.3
Traditional healer	0.3
Faith healer	0.0
Herbalist	0.6
Other	0.0
Number of Individuals ('000)	772

Source: KNBS (2016), KIHBS 2015/2016

Table 9.2 presents the distribution of population reported to have been sick or injured and the type of health provider they visited. Majority of Nairobi County residents who reported illness visited private hospital/clinic (39.5%) followed by those who visited government dispensary at 22.5 per cent, government hospitals (21.8%), government health centre (14.2%). About 2.9 per cent of the county residents visited faith-based (church, mission) hospital/clinic.

Population with health insurance cover

The percentage distribution of the population with health insurance cover by type of insurance provider is presented in Table 9.3. In general, 40.7 per cent of the county population had some form of health insurance cover. The National Hospital Insurance Fund (NHIF) was the leading health insurance provider reported by 96.3 per cent of the population. Employer contributory insurance cover was reported by 12.9 per cent of the population. Private contributions to insurance cover were reported by 1.4 per cent of the population.

Table 9.3: Percentage distribution of the county's population with health insurance cover by type of health insurance provider (%)

Source of Health Insurance	Percentage Distribution of the Population (%)
Population ('000)	4,463
Share of population with health insurance (%)	40.7
NHIF	96.3
Private contributory	1.4
Private-non-contributory	0.3
Employer-contributory	12.9
Employer-non-contributory	0.7
Other	0.6
Number of individuals ('000)	1,818

Source: KNBS (2016), KIHBS 2015/16

Place of delivery

In the 2015/16 KIHBS, women in Nairobi County were asked the place where children aged 5 years and below were delivered. Table 9.4 shows the percentage distribution of children by place of delivery in the County. About 8.8 per cent of children were delivered at home, which is higher than the national percentage of 31.3 per cent. The proportion of children born in hospitals, health centres, dispensary/clinics was 79.2 per cent, 1.6 per cent, and 1.7 per cent, respectively.

Table 9.4: Proportion of children aged 0-59 months by place of delivery (%)

Place of Delivery	**Proportion of Children aged 0-59 Months by place of delivery (%)**
Hospital	79.2
Health centre	1.6
Clinic/Dispensary	1.7
Maternity home	8.3
At home	8.8
Other	0.0
Not stated	0.4
Number of Individuals ('000)	600

Source: KNBS (2016), KIHBS 2015/16

Immunization for children

The 2015/16 KIHBS covered data on measles immunization for children below 5 years at 9 months (Measles I) and at 18 months (Measles II). The information was collected from vaccination cards where they were available while mother's recall was used where the card was not available. Table 9.5 presents information on the proportion of children immunized (from vaccination cards) against measles. The analysis focused on children aged 12-23 months (or one year). The county had 28.6 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 10.4 per cent were fully immunized against measles at 18 months.

Table 9.5: Proportion of children aged 0-59 months immunized against measles

		Proportion of Children
Vaccination Card	Yes seen	41.1
	Yes, not seen	55.5
	No	2.9
	Not stated	0.4
Measles Vaccination	Measles I (at 9 months card)	28.6
	Measles II (at 18 months card)	10.4
	Measles II (mother/ guardian memory)	49.1
	Either (card or memory)	77.7
Number of Individuals ('000)		600

Source: KNBS (2016), KIHBS 2015/16

Health outputs

The most prevalent diseases are respiratory system, which accounts for 46 per cent of the total cases reported. This is followed by skin diseases, which accounts for 11.2 per cent. Other diseases include diarrhea, which stands at 6.0 per cent, urinary tract infection 5.1 per cent, arthritis and joint pain at 3.8 per cent, hypertension at 3.1 per cent, pneumonia at 3.1 per cent, other injuries at 2.9 per cent, eye infection at 2.1 per cent and intestinal warms at 1.0 per cent.

The most common form of malnutrition in the county are stunted growth under 5 years, which accounts for 27 per cent followed by underweight at children 8 per cent, wasted at 7 per cent and overweight children at 6 per cent.

All health institutions in the county offer immunization services, which stood at 90 per cent in 2017 above the WHO recommended rate of 85 per cent. The county has not achieved 100 per cent immunization of child partly due to prolonged medical health strikes, which has affected the performance of health facilities.

The proportion of pregnant women who attended at least one ante-natal clinic visit during pregnancy is 67.2 while delivery by skilled attendant coverage is 63.4 per cent. Maternal mortality rate stood at 40.9 per cent while total deliveries in the hospital are 19,882. In addition, the infant mortality rate was 44/1000 live births, under-5 mortality was 82/1000 live births while neo-natal mortality was 32/1000 live births (KDHS, 2014)

HIV prevalence in the county is at 3.8 with females being the most affected at 6.1 per cent. The ART adult coverage is 82 per cent while ART coverage in children was 90 per cent (HIV survey, 2016).

Table 9.6: Health indicators in Nairobi County

Key Health Indicators	County Estimates
Maternal and Child Services	
Skilled delivery (%)	63.4
Children born at home	35.1
Fully immunized child	90
Child Mortality	
Infant mortality (*/1000)	44
Under-5 mortality (*/1000)	82
Neo-natal mortality (*/1000)	32
Nutrition Status	
Stunted children (%)	26.5
Wasted children (%)	6.5
Underweight children (%)	8.1
HIV (%)	
HIV adult prevalence (%)	3.8
Children with HIV (No.)	2400
ART adult coverage (%)	82
ART children coverage (%)	90

Source: KNBS (2014), KDHS; KNBS (2018), KDHIS

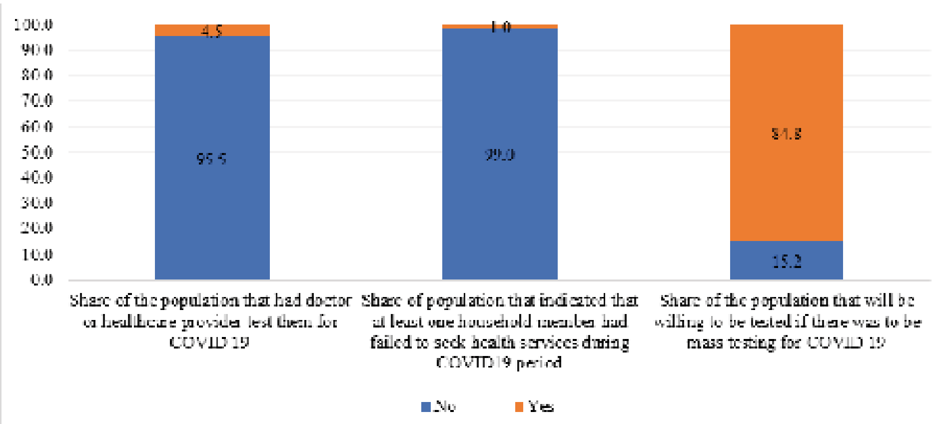
Effects of COVID-19

Despite the fear brought about by COVID-19, service delivery continued in all the health facilities although workload reduced drastically after the first case of Coronavirus disease was announced in the country as the public viewed the health facilities as environments for contracting COVID-19.

There has been continuous health education, which has seen a change in this misconception, and the patients flow is almost back to normal. The County is following guidelines and protocols for prevention of COVID-19 to be practiced in the health facilities, with screening and triaging of patients on arrival at the facilities. At community level, the Community Health of Volunteers (CHVs) have been trained and sensitized on COVID-19 and they continue to pass the necessary information to the other members of the community. However, outreaches to the community had been temporarily halted but are back to normal.

In June 2020, the Kenya National Bureaus of Statistics conducted a survey of COVID-19. The results showed the share of the population that had doctor or healthcare provider testing or confirming to them the status regarding COVID 19 was estimated at 4.5 per cent in 2020 (COVID 19, Wave 2 survey). This small number shows that there is a large population of people in the County who have not yet been tested for COVID-19. Further, 1.0 per cent of members of the population indicated that at least one household member had failed to seek health services and 84.8 per cent of the population indicated they will be willing to be tested if there was mass testing for COVID 19. Therefore, a lot of awareness is among the county population.

Figure 9.1: COVID-19 Testing, 2020



Source: COVID-19 Wave 2 (June 2020)

Teenage pregnancies, and Sexual and Gender Based Violence (SGBV) are some of the health issues affecting the youths in Nairobi City County. The closure of schools due to COVID-19 affected children socially; this has seen one in ten girls being victims of teenage pregnancies. This is alarming given that only 2 per cent of teenage mothers always return to school.

As per the latest National Adolescents and Youth Survey (NAYS) report of 2020, the main health problems affecting young people are teenage pregnancies, drug, and substance abuse (DSA), STI and/or HIV and AIDS infections, malnutrition, mental health problems, SGBV and abortion. Other problems that were mentioned are poor sanitation and existence of diseases such as malaria. The main causes of the health issues in the County are high levels of poverty in households, fear of knowing HIV status. Addiction to Drug and Substance Abuse (DSA), idleness, parental negligence/lack of parental guidance and lack of or inadequate health information and services.

The sector has linkages with the education, ICT, WASH and agriculture sectors. There is a direct proportionality between education and health. The high the education level of members of the county, the healthier they are. High level of education reduces instances of disease outbreaks due to ignorance. This particularly reduces health diseases such as sexually transmitted diseases among the youths and adults.

Advancement in ICT also helps improve the health sector. This is because with ICT, it is easy to scan for diseases and manage the treatment. With advancement in ICT, it is possible to do diagnosis to patients and treat them promptly. A good example is the scan for pregnant mothers and cancer patients. In some countries such as Rwanda, drones are being used to deliver blood. This is helping in mortality rate reduction. Good water and sewerage facilities also contribute greatly to reduction of diseases such as cholera, typhoid and other waterborne diseases.

Good disposal of waste by avoiding open defecation and using toilets also helps reduce the spread of diseases through human waste. The agriculture sector also plays a key role in ensuring that people get a balanced diet and good nutrition. This reduces cases of malnutrition and stunted growth among children due to lack of certain nutrients and vitamins. Agriculture also serves as a source of revenue and employment, mostly for females. This reduces cases of family conflicts and stresses, hence reducing mental diseases.

9.2 Opportunities with COVID-19 in the Health Sector

The pandemic has led to utilization of local capacity in production of masks and PPEs. This has promoted growth of local industries, hence creating employment. It has also challenged the County Government, hence exposing the health sector since it lacks enough ICU beds. More attention is now being given to the sector, leading to improved health services. The county has also received several donations in terms of bed and PPEs, which have contributed to general improvement of the health sector in general.

9.3 Emerging Issues

The COVID-19 pandemic has increased the demand for isolation centres, admission beds, ICU and HDU beds. It has also overstretched the existing health facilities. Additionally, with the spread of the pandemic across counties, it has created fear among the residents and some of them have opted not to visit the hospital in fear of contracting the virus.

The outbreak of the virus has caused the County to reprioritize its health sector priorities and some preventative and promotive health services such: malaria control; expanded programmes on immunization; integrated management of childhood illness; and control and prevention of environmentally communicable diseases have been affected to some extent.

9.4 Recommendations

In line with the health status in the county, some of the recommendations that need attention include the following:

(i) Revamp, expand, modernize and equip health facilities, including, Mbagathi District Hospital and Mathari National and Teaching Hospital; promote training and recruiting high number of health officers to enable health centres provide equitable essential services throughout an emergency, limiting direct mortality and avoiding increased indirect mortality.

(ii) Create awareness on availability and importance of free maternity services and address other constraints to access of maternal health services in the county including addressing the fear of contracting COVID-19 in event of visiting a health facility.

(iii) Allocate resources towards nutrition specific and sensitive programmes in the County by establishing specific budget lines for nutrition support initiatives.

(iv) Promote and support public and community health including the installation of hand washing facilities in homes and institutions such as schools, tertiary education institutions, public workplaces and health care facilities within Nairobi County.

(v) Strengthen preventative and promotive health services through malaria control; expanded programmes on immunization; integrated management of childhood illnesses; and control and prevention of environmentally communicable diseases. This intervention is in line with CIDP 2018-2022 of eliminating communicable conditions and halting and reversing the rising burden of non-communicable diseases.

(vi) Proactively address the mental health needs including those of the health workforce, mental illnesses from depression, especially in response to shutdowns and economic downturns.

(vii) Address the training needs of healthcare workers, including frontline health workers and facilitate their protection through the supply of Personal Protective Equipment (PPEs) as the frontline healthcare workers address the clinical and isolation needs of patients and the public at large.

10. Education and Training

10.1 Characteristics of the Sector

General education provision in the county

The County has 205 public primary schools with total enrolment of 193,058 and 2000 private primary schools with a total enrolment of 254,476. The teacher to pupil ratio in the primary schools is 1:47. The gross enrolment rate is 84 per cent while the net enrolment rate is 77.8 per cent. Dropout rate stands at 3.6 per cent. The average years of attendance for primary school are 8 years while the retention rate is 90 per cent. The transition rate to secondary is at 78 per cent.

In addition, the county has 95 public secondary schools and 57 private secondary schools with 2,028 teachers. The teacher to pupil ratio is 1:24, with a total enrolment of 48,669. The gross enrolment rate is at 28.6 per cent while the net enrolment is 25.3 per cent. The dropout rate is 5.5 per cent; completion rate is 91.8 per cent while the retention rate is 94.6 per cent. The County has 211 public Early Childhood Development (ECD) centres. Among these, 21 are stand-alone ECDs while 190 are in main primary schools. The private ECDs are 344 in number. The total number of ECD teachers is 413. The teacher: pupil ratio in the pre-primary school is 1:29. The total enrolment in the public ECDs is 12,019 with that of private ECDs being 182,618. The pre-primary retention rate is 99 per cent with a drop-out rate of 0.2 per cent while the transition rate is 99 per cent

There are 12 vocational centres in the County with total enrolment of 477 students. The number of vocational training instructors are 45. The teacher to student ratio is 1:11; transition rate is 45 per cent while the retention rate is 55 per cent.

About 96.6 per cent of public primary schools in Nairobi County have been installed with ICT infrastructure and devices under the Digital Literacy Programme (DLP) (ICT Authority, 2019). The infrastructures include learner digital devices (LDD), teacher digital devices (TDD) and the Digital Content Server and Wireless Router (DCSWR).

Gross Attendance Ratio (GAR) and Net Attendance Ratio (NAR)

The Gross Attendance Rate (GAR) for pre-primary school was 80.8 per cent while that of primary school and secondary school was 101.3 and 88.4 per cent, respectively, in 2015/16 (Table 10.1). Gross Attendance Ratio (GAR) represents the total number of persons attending school regardless of their age, expressed as a percentage of the official school age population for a specific level of education. The GAR for pre-primary school was higher for females, 86.4 per cent, compared to that for males, 74.5 per cent. The GAR for primary school was higher for females, 102.2 per cent, compared to that for males, 100.5 per cent. The GAR for secondary school was higher for females, 94 per cent, compared to that for females, 81.3 per cent. Net Attendance Ratio (NAR) is the total number of persons in the official school age group attending a specific education level to the total population in that age group. Table 10.1 shows that the total NAR for pre-primary, primary and secondary school was 74 per cent, 90.6 per cent and 65 per cent, respectively.

Table 10.1: Gross attendance ratio and net attendance ratio by educational level in Nairobi County

Education Level	Gender	Gross Attendance Ratio	Net Attendance Ratio
Pre-Primary School	Male	74.5	68.6
	Female	86.4	78.8
	Total	80.8	74.0
Primary School	Male	100.5	90.1
	Female	102.2	91.1
	Total	101.3	90.6
Secondary School	Male	81.3	62.4
	Female	94	67.0
	Total	88.4	65.0

Source: KNBS (2016), KIHBS 2015/16

Basic education gross and net enrolment rate

The pre-primary gross enrolment rate in the county was 92.8 per cent in 2019 while the net enrolment rate was 69.2 per cent. The Gross Primary and Secondary enrolment rates stood at 100.7 per cent and 105.6 per cent, respectively, in 2019 while the Net Enrolment Rates (NERs) were 86.1 per cent and 64.2 per cent for primary school and secondary school, respectively, during the same period.

Table 10.2: Gross and net enrolment rate (%), 2019

Pre-primary	2019
Gross Enrollment Rate (GER) (%)	92.8
Net Enrollment Rate (NER) (%)	69.2
Gender Parity Index	0.99
Primary	
Gross Enrollment rate (GER %)	100.7
Net Enrollment Rate (NER) (%)	86.1
Gender Parity Index	1.00
Secondary	
Gross Enrollment Rate (GER) (%)	105.6
Net Enrollment Rate (NER) (%)	64.2
Gender Parity Index	0.96

Source: KNBS (2021)

High rate of school dropouts can be attributed to factors such as harsh environment, early marriages mostly among the girls, teenage pregnancies where girls drop out of school after becoming pregnant for the fear of ridicule by colleagues, lack of school fee due to poverty especially if one is admitted in a boarding school, drug and substance abuse, school absenteeism by teachers and pupils and indiscipline among some pupils leading to expulsion.

These challenges have been contributed by many factors such poor parenting, which leaving children unguided, poverty which pushes girls to be married at early age, negative cultural practices such as FGM and forced early marriages, peer pressure and easy dugs accessibility. To address the issues, there is need to create awareness against drug and substance abuse, offer guidance and counseling to students, introduce free and compulsory secondary education, discourage negative cultural practices that affects school attendance and ensure there is no teacher absenteeism

Literacy

The analysis of literacy is based on respondents' self-assessment as no reading and writing tests were administered during the data collection. Further, it was assumed that anybody with secondary level of schooling and above could read and write. The percentage distribution of population aged 15 years and above by ability to read and write is presented in Table 10.3. The proportion of literate population in the county was 98.3 per cent with the male population being more literate (98.7%) compared to their female counterparts (97.9%).

Table 10.3: Percentage distribution of population aged 15 years and above by ability to read and write (%)

	Ability to Read and Write	**Percentage Distribution (%)**
Overall county	Literate	98.3
	Illiterate	0.9
	Not stated	0.8
	Number of Individuals ('000)	3,055
Male	Literate	98.7
	Illiterate	0.5
	Not stated	0.7
	Number of Individuals ('000)	1,563
Female	Literate	97.9
	Illiterate	1.3
	Not Stated	0.8
	Number of Individuals ('000)	1,491

Source: KNBS (2016), KIHBS 2015/16

Educational attainment

The distribution of population aged 3 years and above by educational qualification attained is presented in Table 10.4. Approximately 27.3 per cent of the population do not have any educational qualification. This is below the national percentage of 49.7. Only 6.8 per cent of the population has attained university degree. The proportion of the population with CPE/KCPE qualification is 22.8 per cent and that of KCE/ KCSE qualification is 25.3 per cent.

Table 10.4: Percentage distribution of population by highest educational qualification

Highest Educational Qualification	Percentage Distribution of Population
None	27.3
CPE/KCPE	22.8
KAPE	0.4
KJSE	0.2
KCE/KCSE	25.3
KACE/EAACE	0.3
Certificate	6.5
Diploma	7.2
Degree	6.8
Basic/post literacy certificate	0.0
Other	0.0
Not Stated	3.2
Number of individuals (‘000)	4,004

Source: KNBS (2016), KIHBS 2015/16

Percentage distribution of Nairobi County residents aged 3 years and above who had ever attended school by the highest level reached, and sex is presented in 10.5. The proportion of males who had reached primary school level was 33.3 per cent while that of females was 34.3 per cent. Except for primary school, the proportion of males who had reached other levels of education were comparatively higher than females. For instance, for all persons who reported to have attended school, 7.4 per cent of males and 7 per cent females had reached pre-primary school level in the County. There was a high disparity between the proportion of persons who had reached university education level, with male recording a higher percentage than female at 10.8 per cent and 8.3 per cent, respectively.

Table 10.5: Percentage distribution of residents 3 years and above who had ever attended school by highest level reached, and sex for Nairobi County (%)

Educational Level	Gender	Percentage Distribution of Population 3 Years and above
Pre-primary	Male	7.4
	Female	7
Primary	Male	33.3
	Female	34.3
Post-primary vocational	Male	1.4
	Female	0.8
Secondary	Male	30.6
	Female	31.4
College (middle-level)	Male	14.9
	Female	13.5
University	Male	10.8
	Female	8.3
Madrassa / Duksi	Male	0
	Female	0
Other	Male	0
	Female	0.2
Not Stated	Male	1.6
	Female	4.4
Number of Individuals ('000)	Male	2,036
	Female	1,968

Source: KNBS (2016), KIHBS 2015/16

The main education problems affecting youth as per latest National Adolescents and Youth Survey (NAYS) report were drug and substance abuse, absenteeism of teachers and students and lack of school fees. These problems were attributed to idleness among youth, parental negligence in supporting and guiding the youth, and poverty. Parental negligence also pushed the youth to engage in activities that predispose them to Drug and Substance Abuse (DSA) and student absenteeism. The consequences of these problems included school dropout especially because of substance and drug abuse and poor education performance at national level examinations.

Just like other counties, many people in Nairobi County lost their jobs because of the COVID-19 pandemic. Private schools were forced to lay off both teaching and support (casuals) staff because they could not sustain their salaries. Public schools also faced challenges in making payment for the other expenses such as electricity, water, and security bills. This is because the national government halted the release of money to the schools. Apart from the other expenses, public schools could not pay teachers who were hired on contract and were under Boards of Management (BOMs).

Even after reopening of schools, private schools will have been struggling to come back to the feet as many of them had suffered huge losses. There is a likelihood that some of the schools will close permanently unless the government comes to their rescue. The government has sent money to public shows to pay teachers employed on temporary terms by the Board of Managements.

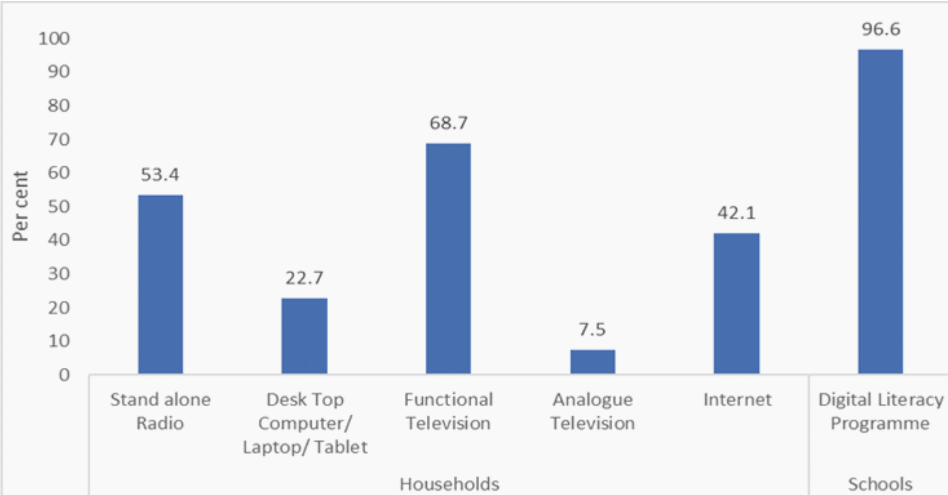
The Education Department in Nairobi County is committed to the provision of quality education and training, including providing support to all levels of education in line with the Provisions of the Intergovernmental Act, 2012. There is need for the County to input in more resources in the education sector to facilitate the re-opening of learning institutions.

Water is a shared commodity between community and the schools. The County government could ensure that all learning institutions have water for proper hygiene during this COVID-19 period. School uniform and learning materials such as books are provided by parents. Schools should make sure that there are enough classrooms to accommodate all learners when schools re-open. There is need to cover days lost through make up programmes both at home and in schools. There is also need for employment of more teachers in case of double tracks.

ICT in education

The entire County is not fully networked, hence limited access to the e-learning programme for the larger portion of school children at home. Although almost all schools had access to the digital literacy programme, only 42.1 per cent of households had access to Internet. Another challenge is the inability of private schools to sustain their teachers while they are not in operation.

Figure 10.1: Access to ICT in households and schools



Source: KNBS (2019), Kenya Population and Housing Census (KPHC, 2019)

On the linkage to other sectors, the line Ministries and Departments such as Health, Ministry of Health and development partners such as UNICEF, AMREF are involved in child immunization through multi-sectoral approach. In addition, through ICT, other children within the county have managed to continue with their schoolwork at home. Health is concerned with operation of education sector as it defines the measures to put in place in preparation to re-open schools under the new normal. Education is also directly linked to agriculture sector to enhance food security. Some school dropout cases are due to lack of food, and that is why agriculture comes in to provide food for the students, thus enabling them to concentrate in class.

10.2 Opportunities with COVID-19 in Education and Training

The demand for PPEs such as masks in the County has led to local production by Voluntary Counselling Centres (VCTs), hence creating employment and income for youth. It will, however, be important to address issues of standards and quality of the locally produced PPEs. The COVID-19 pandemic has also provided opportunity for the County government to forge partnerships to ensure enough network coverage across all the sub-counties and counties in the Lake region. There is also the opportunity of exploring online classes. This, if effective, can save time spent on travelling from home to schools to teach. Teachers will be able to reach at the comfort of their seats. This can reduce cases of lateness and absenteeism. Learning from homes will also reduce accidents and injuries among pupils at school. It will also reduce indiscipline and drug abuse as parents will be able to closely monitor their children at home. The disease has also created an opportunity for creativity among students who are involved in making of ventilators and researching on vaccines.

10.3 Emerging Issues

Limited access to desktops, laptops and Internet connectivity by many school-going children who have missed the studying at home programme. Lack of clear schools re-opening strategy among the private and public schools.

10.4 Recommendations

(i) The County with support from stakeholders should continue to invest in early childhood development through infrastructural development to allow for adequate social distancing, deployment of ECDE teachers and provision of sanitation facilities.

(ii) The County to involve communities to mobilize learners when schools re-open, while deepening implementation of COVID-19 mitigation measures. The County could combine community participation and large-scale direct communication campaigns to parents, and where possible increase attendance options to accommodate all children, including those with highest risk of dropping out, and promote back to school campaign and community outreach to ensure that no child is being dropped out of school due to COVID-19 emergency.

(iii) The County to prioritize projects that improve school water, sanitation and hygiene facilities and management to reduce future effect of similar or related outbreak while promoting public health in learning institutions.

(iv) The County to promote remedial/catch up lessons for learners who might have lagged, and also schools to utilize ICT platforms and have a depository of teaching and learning materials that learners could use at their own time and while at home.

(v) The County to provide financial or in-kind support, such as school feeding, to help families overcome the increased costs of attending school, also provide psychosocial support to teachers and learners.

(vi) Concerted efforts will also be required to fight drug and substance abuse among the youths in the county. This can be done through counseling and ensuring that the youth are not idle especially when learning institutions are locked.

(vii) The Government needs to come in and support private institutions that are facing threat of closure due to losses because of closing school indefinitely. This can involve giving grants and loans to the private schools.

11. Social Protection

11.1 Characteristics of the Sector

Sources of vulnerabilities in the County

According to the KNBS census 2019, Nairobi County has a population of 4.4 million of which 1.3 per cent are the elderly and 1.1 per cent are people living with disabilities. The overall poverty rates in the County stand at 17 per cent, which is higher than the national average of 36.1 per cent. The county's food and multidimensional poverty level are at 16.3 per cent and 15.2 per cent of the total population, respectively. Further, about 23 per cent of the children population is stunted. The impact of the COVID-19 to the county's economy cannot be gainsaid.

Severe shocks to the households

Severe shocks have had negative impact to the household's economic and social welfare of county residents. Table 11.1 presents the proportion of households by the first severe shock in the county. The major shocks in the county are the large rise in price of food, which affected about 29.9 per cent of the County households followed by robbery/assault/burglary and dearth of family member, which affected 11 per cent and 13 per cent of households, respectively. Other major shocks include loss of salaried employment or non-payment of salary and household business failure.

Table 11.1: The proportion of households by the first severe shock in the County

First Severe Shock	The proportion of households (%)
Droughts or floods	2.5
Crop disease or crop pests	0.8
Livestock died	3.2
Livestock were stolen	0.7
Household business failure, non-agricultural	7.3
Loss of salaried employment or non-payment of salary	9.5
End of regular assistance, aid, or remittances from outside the household	1.4
Large fall in sale prices for crops	1.0
Large rise in price of food	29.9
Large rise in agricultural input prices	1.0

Severe water shortage	4.0
Birth in the household	1.0
Death of household head	3.0
Death of working member of household	-
Death of other family Member	13.0
Break-up of the household	3.0
Bread winner jailed	0.0
Fire	2.0
Robbery/Burglary/Assault	11.0
Carjacking	1.0
Dwelling damaged, destroyed	1.0
Eviction	1.0
Ethnic/Clan Clashes	-
Conflict	0.0
HIV/AIDS	1.0
Other	-
Number of households with Shock	**902,000**

Source: KIHBS 2015/16

Distribution of social assistance beneficiaries

Households in the county received various forms of social assistance or transfers or gift either in form of a good, service, financial asset, or other asset by an individual, household or institution. Transfers constitute income that the household receives without working for it and augments household income by improving its welfare. Cash transfers include assistance in form of currency or transferable deposits such as cheque and money orders. The proportion of households that received cash transfers by source, household headship, residence and county is presented in Table 11.2. Overall, 15 per cent of households received cash transfers. A higher proportion of households received transfers from within the country (87%), mainly from individuals (86%) while external transfers constituted 16 per cent.

Table 11.2: The proportion of households that received cash transfers by source, and household headship

		Beneficiaries
	Total number of households	1,503,000
	Households receiving transfers (%)	15

From inside Kenya	Individual	41,056
	Non-profit institution	2,283
	National government	1,755
	County government	152
	Corporate sector	2,010
Inside Kenya		47,256
Outside Kenya		2,048
Total		41,794
Number of households that received transfers		**223,000**

Source: KIHBS 2015/16

The main source of revenue to implement social protection activities in the county were mostly government budgetary allocations and donor contribution to OVCs, PWDs, and the elderly. The County government has been complementing the work of the National government on taking care of the OVCs. The County government aims at protecting children from abuse, neglect and discrimination in accordance with the Children's Act, 2001, and the Education Act, 2012.

Loss of jobs and business opportunities led to an increase in poverty and declining of people welfare. With loss of jobs and businesses, most youths were involved in activities such as crimes, prostitution, and other social evils. Job losses also increased suffering among county residents. In addition, decreased county revenue made it hard for the county to cater for the needy cases and mostly those affected by COVID-19. In addition, unemployment and recruitment to the terror groups posed a great danger to the youths in the county.

Social protection is directly linked to the health sector. When people's social welfare is good, that is people have good health insurance, they can be able to access health services in case of sickness. When people welfare is affected by loss of employment and closing of businesses, they are more likely to suffer from diseases such as stress and depression. ICT also plays a key role in terms of information dissemination through media such as radio, television, mobile phones, etc. Communication is key especially for the people in business as one needs to order for goods or services. ICT is also involved in record keeping of those people in schemes such as NHIF and NSSF, and other insurances.

Additionally, social protection is directly related to education. The more one is educated the more is informed of existing welfare schemes. Educated people are also aware of the need for and importance of engaging in social protection programmes such as insurance and investment for the future to benefit after retirements. With good education, one can understand the role of the government in ensuring good life for its citizens.

11.2 Opportunities with COVID-19 in Social Protection

The COVID-19 exposed lack of preparedness among counties in terms of responding to the emergencies such as COVID-19 pandemic. It provided an opportunity to measure how county governments are prepared to handle the devolved functions. Health being a devolved function has really exposed counties, as many of them lack required health facilities such as ICU beds and enough medical personnel. The virus has also given an opportunity to develop social protection programmes to cushion the vulnerable groups in the community in case of outbreak of other diseases.

11.3 Emerging Issues

The COVID-19 outbreak affected all segments of the population and is particularly detrimental to members of vulnerable groups. The County has an estimated 42,703 persons with disability and 1.3 per cent of older persons (aged 65 years and above). The County Government of Nairobi will ensure that deserving households within the informal settlements are cushioned against food insecurity and that people are safe from COVID-19. The county will distribute food targeting all the slum dwellers and will involve community leaders to allow the community to own the interventions. The county will provide soft loans to small scale traders, collaborating with NHIF to increase the number of vulnerable population covered, support initiatives that encourage the participation of women, youth and people living with disabilities such as in initiating tailor-made programmes for the youth, women and PWD that will entice their participation; enhancing protection of vulnerable groups through establishing emergency family protection fund; and equipping rescue centres and collaborating with social welfare organizations.

11.4 Recommendations

The COVID-19 pandemic created effects with immediate and long-term economic consequences for children, PWDs, the elderly and their families. To strengthen social protection response in face of a similar pandemic, the County government could:

(i) Build linkages with other public and private agencies, and with NGOs that work with people with disabilities to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training. The government could design and implement a disability grant for those severely disabled, and those above the age of eligibility for orphans and vulnerable children, and below the age of eligibility for the old age cash transfer grant.

(ii) Enroll more County residents in welfare programmes such as NHIF, which will ease their access to health facilities at subsidized cost.

(iii) Give tax exemption for the SMEs who have suffered losses in their business as result of COVID-19. The County government could create a fund where they can collaborate with local banks in offering loans to SMEs to restart and boost their businesses. The elderly will be provided with food and other basic needs since their movement has been reduced as they are at great risk of contracting the virus.

(iv) Build linkages with Ministries and with NGOs that work with people with disabilities to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training.

(v) Protect vulnerable groups of the population from health costs by increasing coverage of the NHIF; improving knowledge of the existing insurance scheme (NHIF) to improve uptake; and subsidizing NHIF premiums for targeted populations.

12. Human Resources

12.1 Characteristics of the Sector

Sources of employment in the County

The main economic activities in Nairobi City County include livestock farming, fruit farming, sand harvesting, mining and trade. The food crops grown include cereals. The County is well-endowed with natural resources such as water from rivers Athi and Tana, livestock, minerals, game, tourists' attraction sites, rangeland and pastures. Other sources of employment are government departments, Non-Governmental Organizations, donor agencies and business organizations. A small percentage is self-employed, and they engage in jua kali (small scale businesses), hawking and livestock selling, among other economic activities. The County Government has invested in vocational training institutes and given more incentives and subsidies to investors and entrepreneurs so that they can in turn create more job opportunities especially for the youth who make a large portion of the unemployed.

Loss of employment and closing of businesses due to COVID-19 had far reaching consequences to county residents. This has affected sources of income. With the loss of jobs in the Small and Medium Enterprises, the livelihoods of people working in these sectors were directly or indirectly affected, particularly the youth as the sector employs most of the young population. The loss of jobs in the *matatu* and *boda boda* industry had directly impacted on the lives of the youth, as some residents avoided public means of transport in fear of contracting the virus. In addition, lockdowns in Mombasa and Nairobi counties had a negative impact on long distance drivers in these sectors. The impacts of the pandemic were felt in the services sectors as it affected workers in both private and public sector. Several people working in restaurants and bars were rendered jobless due to closure as ordered by the government.

Table 12.1: Distribution of population age 5 years and above by activity status, and sex in the County

	Male	Female	Total
Population	1,888,886	1,925,799	3,814,871
Working	1,030,840	781,389	1,812,311
Seeking work/ No work available	203,434	218,822	422,288
Persons outside the labour force	653,821	924,806	1,578,696
Not stated	791	782	1576

Per cent working	83.5	78.1	81.0
Per cent seeking work/ No work available	16.5	21.9	18.9

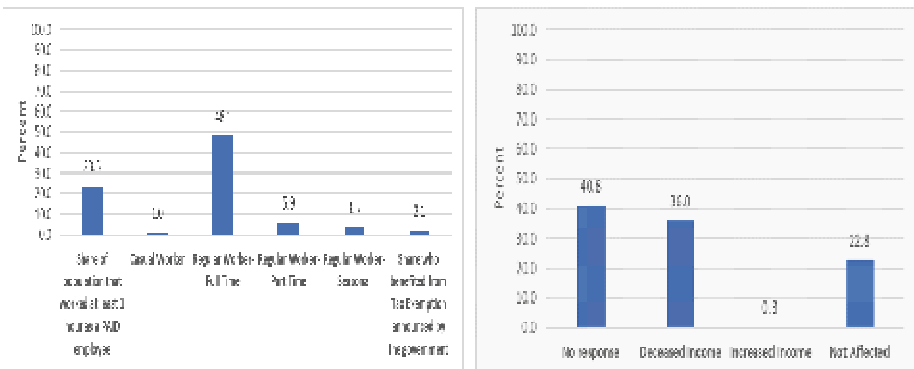
Source: KNBS (2019)

Distribution of population age 5 years and above by activity status, and sex in the county is shown in Table 12.1 above. An assessment on the county labour force indicates that the county population aged 15-64 years (labour force) was estimated at 2,234,599 people of whom 1,812,311 people were working and 422,288 were seeking work, but work was not available, representing an unemployment rate of 18.9 per cent (Kenya Population and Housing Census, 2019). However, the employment and income opportunities are affected by several challenges in the county. The major challenges pointed out in the county include lack of knowledge and skills, lack of capital among the youth, high taxation and insecurity. The informal sector covers small scale activities that are semi-organized, unregulated and use low and simple technologies while employing few people per establishment.

Effects of COVID-19

During the pandemic, about 1.0 per cent of workers in the county were casual workers, 48.1 per cent were regular workers (full time), 5.9 per cent employees were working as part time. However, about 36.0 per cent reported decrease in income while only 0.3 per cent of people reported to have experienced increased income. These could be people working in the health sector, who are supplying medical equipment such as masks and PPEs. About 2.1 per cent of workers indicated to have benefited from government tax exemptions, which indicates about 97 per cent did not benefit from National government tax relief for low-income-earning persons, a reduction in the top Pay-As-You-Earn (PAYE) rate, and other changes such as cash transfers, credit relief, lower VAT, and a corporate tax cut.

Figure 12.1: Effects of COVID-19 on jobs

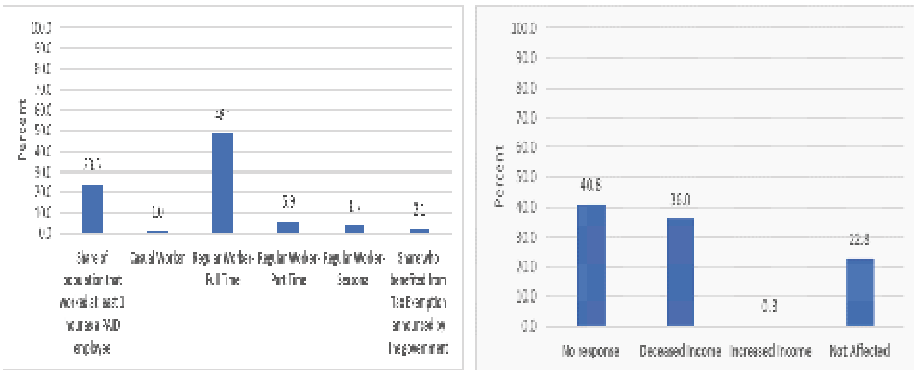


Source: May 2020 KNBS COVID-19 Survey

The COVID-19 had adverse effects on the labour sector in Kitui County. Several people lost their sources of income due to close of business and job loss. This was because of closing bars, entertainment joints and markets. The government closed county popular markets such as Kalundu and Kabati, leaving traders with limited access to markets. However, Kitui County seized the opportunity provided by COVID-19 to start mass production of masks, which have since been in great demand. Kitui County Textile Centre (KICOTEC) plugged in the gap and has since been producing 30,000 face masks daily.

According to the May 2020 KNBS COVID-19 survey, financial and insurance activities sector reported the highest level of loss of hours worked (36.5 hours) followed by workers in education at 33.0 hours (Figure 3). Workers in other service activities and activities of extra-territorial organizations and bodies recorded an average loss of 18.0 hours and 16.4 hours per week, respectively. Transportation and storage and professional, scientific, and technical activities reported loss of 15.1 and 13.0 hours, respectively. This implies that the pandemic negatively affected the County economy, which implies loss of employment, productivity, and output.

Figure 12.2: Difference between usual hours worked and actual hours worked during COVID-19 period



Source: May 2020 COVID-19 Survey

According to the May 2020 KNBS COVID-19 Survey, 49.0 per cent of workers in Kitui recorded decreased income, 5.0 per cent reported increase in income, while 86.4 per cent recorded working as unpaid workers. The County recorded 66.5 per cent of workers in informal sector and 7.8 per cent never attended to work due to COVID-19 related activities. In private sector schools, teachers and other workers lost their incomes. Some other businesses such as bars, hotels, and market centres had totally closed, leading to reduced business activities. Some workers in the transport sector had also been rendered jobless due to restrictions of moving in and out of Nairobi and Mombasa counties. On average, the county lost 11.9 hours worked in a week and the hours lost in economic base of the county, such as services sector and agriculture sector (7.1 hours) will negatively affect the county economy.

12.2 Opportunities with COVID-19 in Human Resource Sector

To minimize on loss of revenue, the County Government has been provided with an opportunity to embark on automating its revenue collection processes. The county will seek to complete and attain 100 per cent automation, especially on payment and monitoring systems for levies collected on rates on property, entertainment taxes, and charges for its services.

The county has been provided with an opportunity of exploring ICT to support the county move on despite the current situation. The county has been holding virtual meetings at different levels of government. In addressing the pandemic, technology has been very significant in contact tracing. The county network coverage is very poor and low, hence the need for more funds to be allocated in the budget for ICT to try and deal with the issue.

The COVID-19 pandemic has hastened the arrival of ICT as the economic effect of the global pandemic (COVID-19) provides an opportunity for the acceleration of the digitalization processes in the work environment. The County government needs to immediately use digital platforms to enable remote access to jobs for their employees where the Human Resource Management will have an essential role to play in navigation of the situation caused by the pandemic.

The pandemic has provided an opportunity for capacity building of health workers as there have been notable efforts by the County government to invest more money in training health workers. The County government now has an opportunity to reskill its employees and develop strategies (mid- and post-pandemic strategies) to adapt to the emerging issues.

12.3 Emerging Issues

The COVID-19 pandemic has expedited the speed at which different firms and businesses within the county are changing their pay programmes through pay reductions and incentive resets. The county governor and his deputy experienced a 30 per cent pay cut. In addition, County executives took a 20 per cent pay cut while county chief officers took 15 per cent pay cut.

There has been reframing of the way the County government segments its workforces to include essential and frontline workers especially in the health sector. As it continues, the County will consider long-term strategies to determine which changes will be temporary versus those that will be permanent.

With the widespread stay-at-home orders, most of county employers are adjusting operations and shifting workforces online, all of which have affected overall employee well-being.

12.4 Recommendations

(i) Enhance universal access to health to collectively finance health services for all, including uninsured workers and their families, and invest in community and primary health including community health workers, water, sanitation, immunization, and public health.

(ii) Build workplace resilience to public health emergencies and outbreaks of infectious diseases in all economic sectors.

(iii) Promote implementation of stronger labour market interventions and policy reforms that drive employment creation. The County to deepen technical education, training, and skills development.

(iv) Create more employment opportunities through development of pro-employment policies; investment in education and training and skills development; and investments within the key sectors of manufacturing, agriculture, infrastructure, tourism, technology, and innovation.

(v) Improve access to finance for small and medium enterprises through collaboration with lending institutions in the county for sustained business. In addition, build capacity in areas related to marketing, operations, finance, and human resource development to enhance chances of survival of SMEs.

(vi) Encourage appropriate flexible working arrangements, such as teleworking.

(vii) Liaise with humanitarian actors and development partners to consider the feasibility of establishing a pool fund to finance seasonal public works or employment guarantee scheme.

(viii) Strengthen the capacity of workers and employer's organizations to enhance their knowledge base and understanding of the mechanism of minimum wages determination amidst COVID-19 pandemic.

13. Conclusion and Key Recommendations

13.1 Conclusion

Fiscal Policy

Nairobi County total revenue has significantly grown by 80 per cent from Ksh 20.11 billion in 2013/14 to Ksh 36.16 billion in 2018/19, the highest ever. However, the total revenues declined in 2019/20 and 2020/21 to Ksh 23.24 billion and Ksh 30.34 billion, respectively, following the adverse effects of COVID-19 pandemic that affected revenue streams. Analysis of the sources of revenue indicate that equitable share from the National Government and Own Source Revenue (OSR) have been the main sources of county funding.

Development spending related to pending bills has been greater than those related to recurrent expenditure, on average accounting for 61.0 per cent of the pending bills portfolio. To ensure continued recovery, the County must now move quickly to tackle the problem of pending bills, mobilize more finances from OSR to increase the available revenue for budgetary operations, seek for more funding in form of grants from development partners to cater for the critical development projects in the county, and ensure that the ongoing projects are completed before launching new projects, and clear any pending bills and arrears owed to suppliers. In addition to this, Nairobi County will mobilize more finances from OSR to increase the available revenue for budgetary operations and seek for more funding in form of grants from development partners to cater for the critical development projects in the county.

Agriculture, Livestock and Fisheries

The agri-food analysis highlights that the sector was negatively affected by COVID-19 in terms of labour supply, trade and marketing operations, food supply and the resulting effects on food prices. At the peak of the COVI-19 pandemic, the County also suffered from floods. The County's agricultural productivity is also affected by variable and extreme weather events; low agro-processing and value addition opportunities; dependence on rain-fed agriculture; low access to quality and affordable inputs; low commercialization and marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services; pests and livestock diseases; and farm losses and post-harvest waste. This adversely affects the productivity of the sector and impairs marketing and consequently places livelihoods and food security at risk especially in times of emergencies. The analysis calls for strategies to enhance productivity, profitability, and resilience of the sector for improved livelihoods.

Water, Sanitation and Hygiene

The County relies more on water from vendors, dug well, and piped water into plot.

Sanitation coverage remained high in the County, with majority of households using flush to septic tank. This presents an opportunity for the County to increase sanitation coverage to increase its additional revenue collection from sanitation services. Similarly, increased access to piped water by rural and peri-urban households can also be potential for revenue.

Manufacturing, Trade and MSMEs

The COVID-19 pandemic disrupted Nairobi City County's trade, manufacturing and MSMEs momentum as containment measures associated with COVID-19 pandemic took a heavy toll on the sector. In sustaining growth in this sector, it is important to strengthen trade and production capacity of MSMEs and especially those involved in manufacturing in the County by exploiting opportunities afforded by the pandemic, such as production of masks, PPEs, hospital beds, ventilators, reagents, gloves, and sanitizers. However, it is also critical to ensure the transitioning out of such products is well managed as the COVID-19 pandemic slows.

Tourism

Nairobi City County is a major centre of tourism in the region. Its relative proximity to many tourist attractions both in Kenya and East Africa makes it an asset of great importance in the tourism sector. Nairobi City County has several world class hotels and restaurants together with excellent Meetings, Exhibitions, Conferences and Exhibitions (M.I.C.E) facilities. There exists eight (8) 5-star hotels and eight (8) 4-star hotels with a combined bed capacity of 5,700 beds, five (5) 3-star hotels, six (6) 2-star hotels and 122 unclassified hotels. It is also home to the largest ice-skating link in East Africa at the Panari Hotel's Sky Centre covering 15,000 square feet and accommodating 200 people. Bed occupancy within the high-class hotels within the County has been growing at an average rate of 9.7 per cent, with the occupancy averaging 90.0 per cent. Accommodation and food services contribute 1.3 per cent to total GCP.

Health

The COVID-19 has worsened the situation as far as youth and women are concerned. These are the groups of people that have been facing several challenges even before the outbreak of the COVID-19. FGM and gender-based violence cases have increased with the lock down. Youths who are entrepreneurs have also been affected, thus losing jobs and businesses due to the lockdown. Other problems facing youths include teenage pregnancies, malnutrition, STI/HIV and AIDS, poor environment, drug and substance abuse and malnutrition.

Education and Training

The County, with support from stakeholders, would continue to invest in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities. The county could provide financial or in-kind support, such as school feeding, to help families overcome increased costs of attending school and provide psychosocial support to teachers and learners during and after the pandemic.

Social Protection

It will be important for the county to build linkages with ministries, and with NGOs that work with vulnerable groups to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training. Research to get a better understanding of the actual situation of disability and chronic illness in the County is needed, and to map existing initiatives on social protection.

Labour Participation

The County will enhance investments and mechanisms for up skilling and reskilling, deepening technical skills and ICT skills; and retraining employees on how to work from home, where applicable. The County Government needs to protect workers in the informal economy by pursuing innovative policies to reach them quickly through a combination of non-contributory and contributory social security schemes and facilitating their transition to the formal economy in the longer-term.

13.2 Key Recommendations

Fiscal Policy

Generally, pending bills related to development have been greater than those related to recurrent expenditure, on average accounting for 61.0 per cent of the pending bills portfolio. To ensure continued recovery, the County must now move quickly to tackle the problem of pending bills, mobilize more finances from OSR to increase the available revenues for budgetary operations, seek for more funding in form of grants from development partners to cater for the critical development projects in the county, and ensure that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers. In addition to this, Nairobi City County should mobilize more finances from OSR to increase the available revenues for budgetary operations and seek for more funding in form of grants from development partners to cater for the critical development projects in the county.

Agriculture, Livestock and Fisheries

To successfully build resilience and enhance growth of the agriculture sector, the County will: explore partnerships to develop agro-processing and value addition capacities at the County; link farmers to diverse product markets; strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural inputs and services and build their technical capacity to act on information obtained; provision of storage and cooling facilities; natural resource management; and strengthen agricultural cooperatives to enhance marketing.

Water, Sanitation and Hygiene

To build resilience and mitigate the effect of COVID-19, the county will increase water supply in households, institutions, and public places by drilling boreholes, dams, and access to piped water in all the sub-counties. The County could promote protection of water catchment areas and promote the use of safe and improved toilets in schools, health care facilities, workplaces, and public places by connecting households to piped sewer. There is also ned to promote handwashing as a measure against COVID-19.

Manufacturing, Trade and MSMEs

In sustaining growth in the manufacturing, trade and MSMEs sector, the County will promote the County City as an economic, industrial and diplomatic hub as planned in the third Medium-Term Plan; collaborate and partner with the counties forming the Nairobi Metropolitan Region - that is Kiambu, Murang'a, Machakos and Kajiado counties, to enhance economies of scale and market for industrial products; invest in water projects, expand the roads and transport network to decongest the city and build adequate and affordable housing; facilitate local and foreign private investors to invest in the Special Economic Zones (SEZs); improve power supply reliability as outlined in the MTP III, for example though investment in cheaper renewable energy; enhance security through continuous installation of National Security Communication Network and the Surveillance System in the City, which is a Kenya Vision 2030 flagship project; and fast-track construction of KIRDI Research, Technology and Innovation Laboratory in South B, which is supposed to support manufacturing as per MTP III.

Tourism

The following strategies are proposed for re-engineering of the tourism sector in the county: promote domestic tourism to cushion the sector from global shocks such as pandemics and other disruption to international travel; diversification and marketing of tourist product offering; come up with the Nairobi annual cultural festival; improvement of hygiene standards in the tourist hotels and attraction sites; improvement on the sanitation aspects, especially during the COVID-19 era whereby tourists will be seeking for touristic experiences that assure them of health and safety; refurbishment of other tourist accommodation facilities to achieve star-rating requirements; enforcement of existing laws regarding pollution and natural resource management; promote usage of 'green' energy such as solar power in tourism establishments and; enhanced energy and ICT infrastructure development; establishment of county tourism online information portal.

Health

For a resilient health sector, there is need for more awareness on immunization so that mothers can ensure their children get immunized. There is need to implement a comprehensive human resource health management system, including undertaking training needs assessments and information system to ensure skilled and motivated health care workers, equitable deployed across all sub-counties. This is in addition to paying the salaries in time to avoid cases of strikes and low staff morale. There is need to recruit additional public health officers and community health workers to strengthen preventive and public health systems.

Education and Training

The County with support from stakeholders will need to continue to invest in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities. The County could also put in place measures that encourage learners to complete all levels of education.

Social Protection

The COVID-19 pandemic created immediate and long-term economic consequences for vulnerable groups, including children, PWDs, the elderly and their families. To strengthen social protection response in face of a similar pandemic, the County government needs to provide basic income security, especially for persons whose jobs or livelihoods have been disrupted by the pandemic. There is need to build linkages with Ministries, and with NGOs that work with people with disabilities to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training.

Labour participation

The COVID-19 pandemic has expedited the speed at which different firms and businesses within the county are changing their pay programmes through pay reductions and incentive resets. It will be important for the County to promote implementation of a stronger labour market intervention, especially those working in the tea sector, which is a major employer in the county and policy reforms that drive employment creation. The County shall deepen technical education, training, and skills development.

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