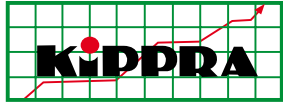


# **Socio-Economic Status of Kitui County with COVID-19**

**Eldah Onsomu, Rose Ngugi, Evelyne Kihui, Mutuku Muleli, James Gachanja, Rogers Musamali, Paul Lutta, Daniel Omany, Hellen Chemnyongoi, Shadrack Mwatu, Nahashon Mwongera, Paul Odhiambo, Beverly Musili, Violet Nyabaro, Japheth Kathenge, Haron Ngeno and Elton Khaemba**



**The KENYA INSTITUTE for PUBLIC  
POLICY RESEARCH and ANALYSIS**  
*Thinking Policy Together*



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**Kenya Institute for Public Policy  
Research and Analysis**

*2022*

## **KIPPRA in Brief**

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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

Kitui County total revenue has grown by an average of 12.43 per cent from Ksh 6.27 billion in 2013/14 to Ksh 11.72 billion in 2020/21. During 2019/20 the county received a total of Ksh. 9.71 billion representing 22 per cent decline compared to the amount received during 2018/19, following the adverse effects of COVID-19 pandemic. Monthly cash transfers from the National government have always had an increasing trend from January to June over the years. Conditional grants are also a source of revenue for financing county operations and has been growing over the years. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA) and Sweden. The share of OSR to total revenue has been relatively stable between 2013/14 and 2020/21, averaging 3.76 per cent. In 2014/15 the county reported Ksh 405.9 million in pending bills. This increased to Ksh. 1,167.1 million in 2017/18 with development spending related pending bills accounting for 80.2 per cent of this. In 2019/20 pending bills slowed to Ksh. 936.2 million before shooting up to Ksh 1,089.7 million at the end of 2020/21, the second highest recorded since devolution. 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 Kitui County to 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 crop and livestock production are a primary source of livelihoods in Kitui County. Key agricultural value chain commodities in the County include: - maize, green grams, beans, sorghum, millet, cassava, kales, watermelons, bananas, sweet potatoes, mangoes, pawpaw, yellow passion, oranges, goats, cattle, sheep, poultry production, donkey keeping and bee keeping (apiculture). 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; water scarcity ; dependence of rain fed agriculture; low access to quality and affordable inputs; low crops, livestock, and livestock products marketing opportunities; low access to major off-farm services including extension, agricultural credit and insurance, climate and market information, and credit services; and pests and livestock diseases; farm losses and post-harvest waste; and poor and inadequate infrastructure. To successfully build resilience and enhance growth of the agriculture sector, the County to: explore partnerships to develop agro-processing and value addition capacities at the County; expansion of water harvesting projects and sustainable irrigation; scale up conservation agriculture, post-harvest management, plant and keep drought-tolerant crops and livestock breeds; 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 faced challenges in revenue collections due to COVID-19 which 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 must 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 to: Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short term. The emergency Fund can be used to identify and support the most vulnerable businesses

and entrepreneurs affected by COVID-19. Related, the County to inject some stimulus to cushion the businesses and traders through affordable credit; waiver of some County taxes, cess, and other charges; COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitisers, hospital beds and ventilators. It is an opportunity to spur innovation and promote manufacturing and industry development and generation of jobs for the youth; Establishments in the county to adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing; Carry out productivity improvement programmes in manufacturing enterprises in the County; Develop and promote value chains in livestock (abattoirs), honey, mangoes, poultry, leather, garment making, Ndengu production; Fast-track establishment of industries in the County to process hides and skins into leather and its products; Prioritize and support value addition in agriculture and livestock industries; and Establish cottage industries for briquette production, wood-fuel production, fabrication of energy saving Jikos, and moulding of clay liners.

### **Infrastructure, housing, and urban development**

The main means of transport used in the County is walking followed by motorbike. The paved County Road network covers 5.78 km, while the paved National roads cover 256.86 km. Out of the total paved road network of 262.64 km, 44.59 per cent is in good condition, 44.88 per cent in fair condition and 10.53 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 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 85.8 per cent, with 14.2 per cent of the households under rental tenure. Majority of households (92.5 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 3.0 per cent reporting a partial waiver, despite inability to pay, because of the pandemic. In addressing the prevailing challenges, the county to Identify a core rural road network for prioritization to improve the rural access index (RAI) from the current 56.0 per cent with a target to match the national average of 70.0 per cent; 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 42.9 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony; Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System. To be used in pandemic and disaster surveillance and emergency response.

### **Tourism**

The County's tourist attractions are categorized as National parks, game reserves and other tourist attraction centres. Wildlife is found in the Tsavo east national park, South Kitui game reserve, Mwingi Game Reserve, which is visited by both domestic tourists (62.1 per cent) and foreign tourists (37.9 per cent). In 2016/17, the county received 665 visitors comprising of 385 domestic and 280 foreign tourists. Other attractions are physical attractions (e.g., the Nzambani rocks); cultural and heritage tourism; ecotourism and conservation; excursions: nature walks; mountain climbing; picnic sites. Kitui County has

an aesthetic view in Mwingi West sub county (ikoo valley) and a snake park in Kitui south and recently a man-made beach (Kalundu EcoPark) in Kitui Central. Kitui county lacks star-rated accommodation facilities. However, there are over a dozen registered facilities, mainly guest houses and medium size hotels located across the county. The county also has potential for enhancing tourism in the following areas which remains under-exploited; Sport tourism, Ecotourism, M.I.C.E, Cultural tourism. The strategies for re-engineering the county's tourism sector include Map all potential tourism sites in the County and developing a Kitui County tourism development masterplan, Tourism niche product development; Creating birdwatching tourism product; developing Nzambani rock ecotourism centre; developing viewpoints, Developing and implementing a tourism promotion and marketing strategy; Promoting sports tourism products to empower the youth; promoting wildlife tourism; Promote cultural festivals; and domestic tourism, Improving on the tourism circuit connecting coast and Kitui County, Upgrading sports facilities to promote talent; setting up a sports council; leveling playgrounds in primary and secondary schools.

## **Health**

In 2019/2020, the number of health facilities in the county were 414 which comprised of 394 primary health facilities and 20 hospitals. This was an improvement from a total of 313 health facilities in the previous year, 2018. The number of beds per 10,000 population is 23 against the WHO recommendation of 30 beds per 10, 000 population. The National Hospital Insurance Fund (NHIF) was the leading health insurance provider reported by 86.1 per cent of the population. Further, Kitui County has a Health Insurance Cover (KCHIC) which provides a subsidized health cover for kshs 1,000 annually and the County has since rolled out the Kitui County Universal Health Cover that offsets half the annual NHIF cost for a number of households in Kitui county. Employer contributory insurance cover was reported by 8 per cent of the population. The county had 47.6 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 15.8 per cent were fully immunized against measles at 18 months. In line with the health status in the county, some of the recommendations that need attention include the following: The county to revamp, expand, modernize, and equip health facilities, including Mwingi Level 4 Hospital and the County Referral Hospital, The county to also recruit additional of public health officers and Community health workers to strengthen preventive and primary health systems and Invest in research and development by partnering with research institutions such KEMRI to spur innovation in health sector including in the area of medicine. 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**

The Gross Attendance Rate (GAR) for pre-primary school was 103.1 per cent while that of primary school and secondary school was 115.2 and 72.2 per cent respectively in 2015/16. Free primary education policy has substantially increased school enrollment rates. The success and sustainability depend on teachers' perception, motivation, and proper implementation of the policy in the classroom. The county is undertaking necessary measures to ensure there will be enough water, masks, soaps and sanitizers in schools before re-opening. Plans are underway to have social health workers educate pupils and students in schools on preventative measures to take immediately they re-open. There is a major problem when it comes to access to e-learning materials because of the COVID-19 pandemic. With regards to access to ICT in Kitui County, 37.1 percent of households were found to have no access to stand alone radio. 3.3 per cent of households were found to have access to a desk top computer/laptop/tablet.

The county to 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 counseling 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 82 per cent which is higher than the national average of 36.1 per cent. The county's food poverty levels are at 48 per cent and 40 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. Currently there is no kitty for relief and social protection/ cash transfer programme to support the vulnerable groups in the county. A significant portion of the budget had been committed to development projects. Several youths were rendered jobless due to COVID-19 which led to closing of business and other operations.

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 County Government of Kitui gave a waiver and supported small and medium enterprises to offset part of their licensing renewal obligations to enhance their operations during COVID-19 severe period. 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 Kitui 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, enroll 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. Already the County government of Kitui, through payment of half the annual NHIF cost for a number of its residents, enhanced welfare of more county residents

## **Labour Participation**

Most of the economy is based on sustenance farming, even though the agriculture is an extremely challenging endeavor giving the sporadic rainfall. 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. The unemployment has increased during the period of COVID-19, according to May 2020 KNBS COVID-19 Survey, 13.4 per cent of the county labour force worked at least for 1 hour for pay; 20.2 per cent had never worked, and 66.5 per cent worked in the informal sector. The Kitui 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.

# 1. Introduction and Structure of Kitui County Economy

## 1.1 Introduction

Kitui County is one of the counties in Southeastern Economic Bloc (SEKEB). The county occupies a land area of 30,496.5 km<sup>2</sup>. The county has an estimated population of 1,136,187 of which 50.5 per cent is male and 49.5 per cent female (KNBS, 2019) as indicated in table 1. Of the total population 27,029 (2.7 per cent) are persons with disabilities. The youth constituted 33.0 per cent of the population of whom 52.0 per cent were female. The County has a population density of 37 persons per km<sup>2</sup>. The elderly population (over 65-year-old) make up 7.0 per cent of the total population of whom 62.4 per cent were female. The population of the school going age group (4-22 years) was 48.7 per cent in 2019.

In 2015/2016, the overall poverty rate in Kitui County was 48.0 per cent against the national poverty rate of 36.1 per cent. In addition, 40.0 per cent of the population were living in food poverty and 81.7 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 KDHS 2014, 38.2 per cent of the children were stunted as compared to the average national level at 26.0 per cent.

**Table 1.1: Development indicators in Kitui County**

Estimated County Population (KNBS, 2019)	County	National
Males	1,136,187	2.4% of the total population
Females	549,046	48.3%
Intersex	587,151	51.7 %
	33	0.002%
Estimated Population Density (km <sup>2</sup> )	37	82
Persons with disability	2.7%	2.2%
Population living in rural areas (%)	95.2	68.8%
Children (0-14 years) (%)	42.9%	41.1%
School going age (4-22 years) (%)	48.6%	68.7%
Youth 15-34 years (%)	33.0%	36.1%
Labour force (15-64 years) (%)	50.6%	55.0%
Elderly population (over 65-year-old)	7.0%	3.9%

Number of COVID-19 cases (as of 11 <sup>th</sup> September 2020) (MOH); National cases were 35,232 people	252	0.73 % of the national cases
Poverty (2015/2016) (%)	48.0%	36.1%
Food Poverty (2015/2016) (%)	40.0%	31.9%
Multidimensional Poverty (2015/2016) (%)	81.7%	56.1%
Stunted children (KDHS 2014)	38.2%	26%
Gross County Product (Ksh million) 2020	136,380	1.3 per cent Share to total GDP
Average growth of nominal GCP (2013-2020) (%)	18.1 per cent	104.8 percent

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 between 15-34 years comprising of 376,068 individuals. They are followed by persons aged between 6-13 years who are the primary school children comprising of 255,319 of the county population. The under 0-3 age comprise of 99,677 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	50,136	49,541	99,677
Pre-primary school age (Under 4-5)	27,561	26,885	54,446
Primary School Age (6 -13)	129,046	126,273	255,319
Secondary school age (14-17)	68,997	66,672	135,669
Youth Population (15-34)	182,055	194,013	376,068
Female Reproductive age (15-49)		278,037	278,037
Labour force (15-64)	294730	325539	325,539
Aged Population 65+	29,966	41,801	71,767

Data Source: KNBS (2019)

## 1.2 Level of Socio-economic Deprivations

In 2015/2016, 8.6 per cent of the population had health insurance cover, 24.7 percent lived in premises with water, 81.2 per cent lived in their own homes and 62.2 per cent had access to mobile telephone (Table 1.3) and majority of the households (86.1%) had access to toilet facility. As a result, the multi-dimensional poverty is estimated at 81.7 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	8.6
Drinking water (Time taken to fetch)	Zero (In premises)	6.8
	less than 30 minutes	35.1
	30 minutes or longer	57.6
Sanitation and Hygiene	Proportion of households with toilet facility	86.1
	Shared Toilet	39.9
	Not Shared	60.1
	Place to wash hands outside toilet facility	11.1
	No place to wash hands outside toilet facility	88.6
Education (Population 3 years and Above by School Attendance Status)	Ever Attended	88.5
	Never Attended	11.3
Knowledge of health and nutrition (children aged 0-59 months that participated in Community Nutrition Programmes)	Participated in Community Nutrition Programmes	6.8
	Did not Participated in Community Nutrition Programmes	93.2
Housing and standard of living (house ownership)	Owner Occupier	81.2
	Pays Rent/ Lease	12.6
Access to information (Population Aged 3 years and above by ICT Equipment and Services Used)	Television	16.7
	Radio	68.4
	Mobile phone	62.2
	Computer	3.4
	Internet	5.8

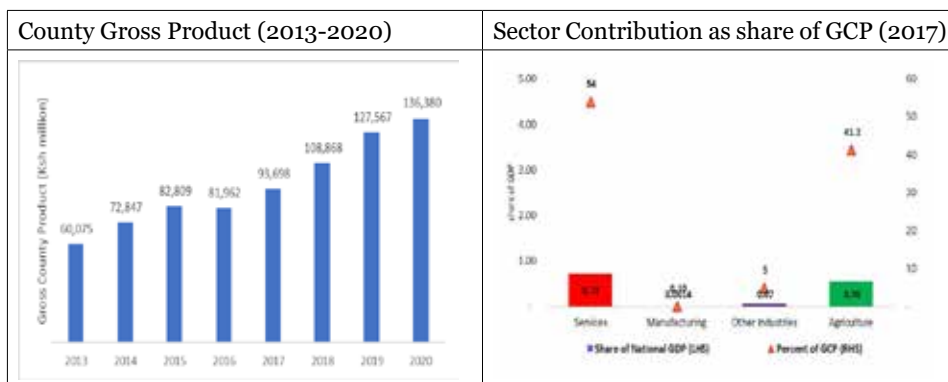
Source: KIHBS 2015/2016

### 1.3 Structure of Kitui County Economy

Kitui County Gross County Product (GCP) accounted for 1.3 per cent of total Gross Domestic Product (GDP) between 2013 and 2020 (figure 1). The GCP increased from Ksh 60,075 million in 2013 to Ksh 136,380 million in 2020 representing an average annual growth rate of 18.1 per cent.

The services sector includes such activities as wholesale and retail trade. Agriculture is mainly dominated by Crop farming and livestock production while industries and manufacturing include production of consumer goods such as food processing furniture and textiles.

**Figure 1.1: Structure of the county economy, 2013-2020**



Data Source: KNBS (2019)

#### 1.4 COVID-19 caseload and Implications of Mobility Restrictions

As of March 2020, Kitui County had zero cases. However, by August 2020, the County had reported 43 COVID-19 cases with mobility stringency of 70.4. The caseload would rise to 583 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 include 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 100 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 Kitui County and the country’s mobility stringency**

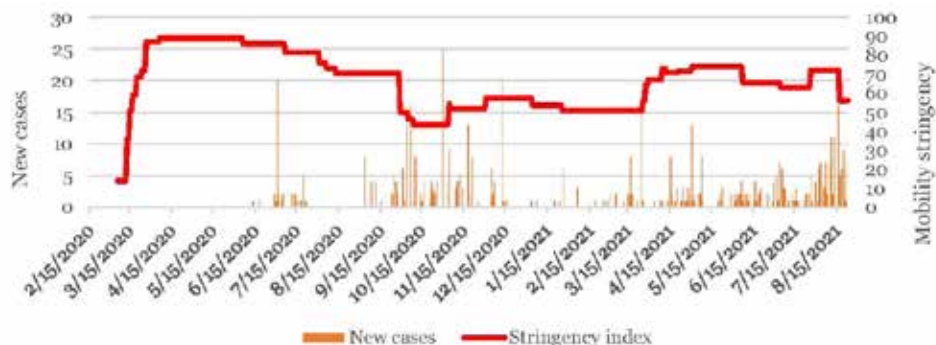
Date	Total cases	Mobility stringency (0-100)
13 <sup>th</sup> March 2020	0	36.1
23 <sup>rd</sup> August 2020	43	70.4
23 <sup>rd</sup> August 2021	583	56.0

Data Source: Oxford University

New COVID-19 cases in Kitui County were highest between June 2020-July 2020, September 2020-December 2020, March 2021-August 2021. During the three 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.

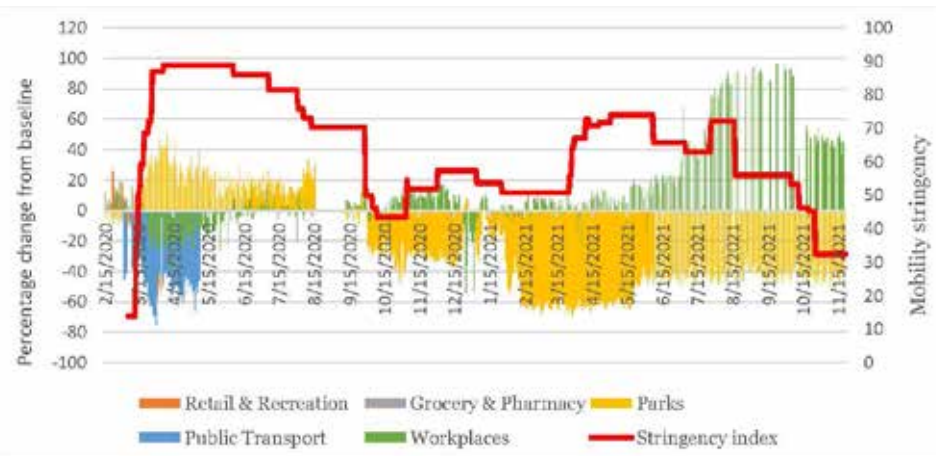
**Figure 1.2: COVID-19 cases in Kitui county and the country's mobility stringency**



Data Source: Oxford University

Demand for workspaces, however, has been resilient between October 2020-November 2021.

**Figure 1.3: Effect of COVID-19 ON Kitui county Economic performance and the national Mobility Stringency**



Data Source: Oxford University

The broad objective of the report is to analyze the socioeconomic 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 Effects of COVID-19

### 2.1 Fiscal Policy

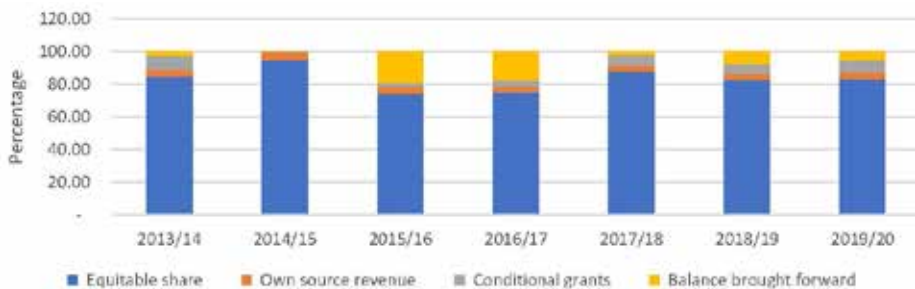
Availability of financial resources is very critical in achieving the counties development plans and settling county expenditures. Timely and adequate funding aid in successful implementation of the county's projects. The County's main revenue sources comprise of the transfers from the National Government, Conditional Grants and its own source revenue (OSR).

#### *Transfers from National Government*

The county total revenue has significantly increased over the years as the Government focus on enhanced services to the citizens. Kitui County total revenue has significantly grown by 12.43 per cent from Ksh. 6.27 billion in 2013/14 to Ksh 11.72 billion in 2020/21. During 2019/20 the county received a total of Ksh. 9.71 billion representing 22 per cent decline compared to the amount received during 2018/19, following the adverse effects of COVID-19 pandemic. The amount realized in 2020/21 was 99.0 per cent of the annual budget allocation of Ksh 11.84 billion, an improvement from 83.3 per cent attained in 2019/20. The improvement was supported by the 100 per cent disbursement of equitable shares and conditional grants from the National government.

Analysis of the sources of county revenue indicate that equitable share has been the main source of county funding accounting for more than 74 per cent of the total revenues over the years (Figure 2.1). On average, equitable share contributed 82.27 per cent of the total revenue between 2013/14 to 2020/21. In nominal terms, it has increased by 66.13 per cent from Ksh 5.32 billion in 2013/14 to Ksh 8.83 billion in 2020/21. During 2020/21, the County received 100 per cent of the annual budget allocation, significant improvement from 83.3 per cent received in 2019/20, accentuating the commitment of the National Government 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 always 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 72.55 per cent from Ksh. 5.09 billion received in January to Ksh. 8.78 billion received June. In comparison to 2019, the total amount transferred to Kitui County in March, April, May, and June of 2020 increased by 4.60 per cent from Ksh 29.40 billion to Ksh 30.76 billion. This was a welcomed move by the county as it facilitated the budgetary operations as well as the implementation of various measures needed to curb the spread of COVID-19.

**Table 2.1: Monthly cash transfers from National Government (Ksh Million)**

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
2021	4,645.76	5,455.97	-	-	-	-	2,598.49	-	-
2020	5,087.91	5,969.32	6,675.74	7,602.93	7,697.93	8,779.22	2,216.42	3,084.10	3,876.61
2019	4,540.38	5,403.00	6,203.14	6,247.28	7,737.59	9,215.58	7,737.59	2,309.91	3,246.13
2018	2,058.02	2,914.71	4,522.74	4,522.74	6,074.83	8,915.26	1,849.33	2,736.75	2,969.13
2017	-	-	4,587.27	5,293.00	6,605.34	7,859.98	-	-	-
2016	-	-	4,288.34	5,523.78	6,141.50	6,141.50	-	-	-

Data source: Gazette Notice (Various issues)

### **Conditional grants**

Conditional grants are also a source of revenue for financing county operations and has been growing over the years. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA) and Sweden. During 2020/21, the County received Ksh 378.78 million and Ksh 607.43 million from National Government and Development partners respectively. The share of conditional grants to total revenue has similarly maintained an upward trend from 0.51 percent realized in 2014/15 to 8.41 percent in 2020/21 (Figure 2.1). On average, conditional grants have contributed 5.44 percent of the total revenue between 2013/14 to 2020/21. In order to sustain the growth trajectory, the county ought to continue with fostering positive relations with development partners and adhering to the terms and conditions of the grants availed.

### **Own Source Revenue**

The share of OSR to total revenue has been relatively stable between 2013/14 and 2020/21, averaging 3.76 per cent (Figure 2.1). To improve on OSR contribution to the total revenue, the County need to develop and implement measures necessary for mobilization and sealing of revenue leakages. Leveraging on digitalization could also improve the OSR collection.

Analysis of annual County OSR performance shows a fluctuating trend for the period under review (Figure 2.2). In 2014/15, OSR collections amounted to Ksh 320.52 million before increasing steadily to Ksh 440.52 million in 2018/19, the highest ever attained by the county. The performance of actual OSR versus target indicate that the county achieved



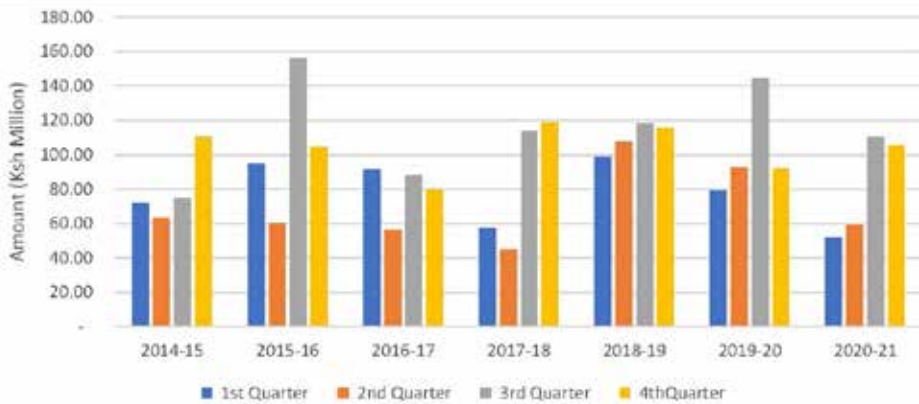
more than 50 per cent of its target over the period save for 2016/17 when it attained 47.16 percent of its targets (figure 2.2). During 2019/20, the county generated Ksh 408.29 million from OSR which was 7.9 per cent decrease compared to Ksh. 443.18 million realized during 2018/19. Further, in 2020/21, the county realized Ksh 326.45 million representing 25.1 per cent decline compared to the amount generated in 2019/20. This implied that the economic shocks triggered by the COVID-19 pandemic affected revenue generation and collection in the county. Specifically, the County treasury premised the decline on delayed NHIF funds to the County, waiver granted on payment of land rates, low marketing on county products like stone crusher, engineering and works levy among others.

**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 and fourth quarters (Figure 2.3). This may be attributed to the collection of single business permit that is due every 31<sup>st</sup> March of the year. During 2019/20, OSR collections during the first quarter amounted to Ksh 79.27 million, thereafter rising in the second and third quarters to Ksh 92.69 million and Ksh 144.43 million respectively. This represented 82.80 per cent growth between the first and third quarters. However, the county collected Ksh 91.91 million during the fourth quarter, representing 36 percent decline compared to Ksh 144.43 million realized during the third quarter of 2019/20 and 21 percent decline compared to Ksh 115.69 million realized during the fourth quarter of 2018/19. Similarly, the quarterly performance during 2020/21 remained low compared to other financial years. The significant decline in quarterly OSR collections during 2019/20 and 2020/21 was mainly attributed to the containment measures undertaken to curb the spread of Coronavirus which led to low economic activity in the county and waivers granted to cushion the residents from the adverse effects of the pandemic.

**Figure 2.3: Quarterly own source revenue collection**

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

## 2.2 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"<sup>1</sup>. 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***

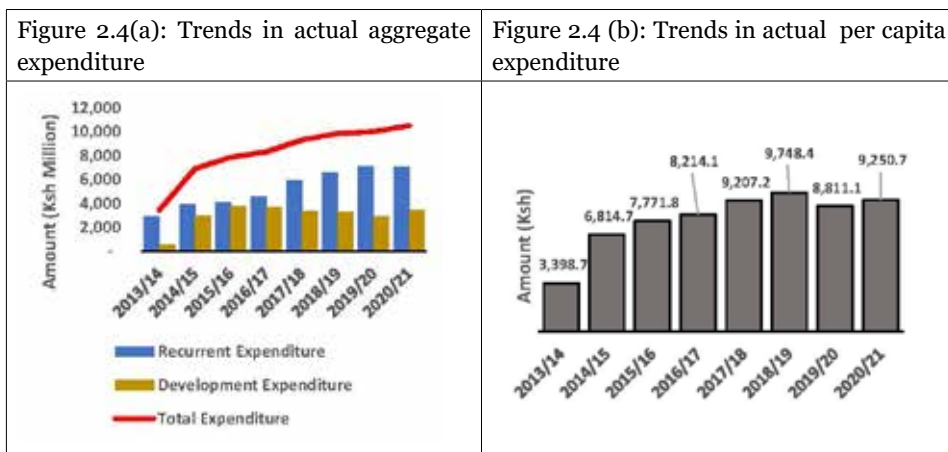
County expenditure has over the years been rising as the county escalates its efforts in provision of services to its residents. Total county expenditure has grown significantly since 2013/14. With the implementation of the first full year county budget in 2013/14, actual expenditure in the county increased from Ksh 3,441.9 million to Ksh 10,510.5 million in 2020/21 (Figure 2.4). Cumulatively the county has spent a total of Ksh 62.7 billion between

<sup>1</sup> UN General Assembly (2014), p. 22, par. 94.

2013/14 and 2020/21. This comprises of a cumulative Ksh. 40.3 billion and Ksh 22.4 billion on recurrent and development expenditures representing 64.2 per cent and 35.8 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 expenditures, 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. 3,398.7 compared Ksh. 9,748.4 in 2018/19 and Ksh 9,250.7 in 2020/21. The average per capita spending between 2013/14 and 2020/21 stood at Ksh. 7,902.1.

**Utilization of public resources in the county**

Analysis of expenditures by economic classification and by departments (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 expenditures has been dominant in provision of health services, public works, education, agriculture, as well as 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 34.3 per cent of total county spending between 2013/14 and 2020/21 as represented in Figure 2.5. In 2013/14 and 2019/20 the share of development expenditure performed below 30 per cent and respectively accounted for just 14.7 per cent and 21.9 per of the county expenditure. On the other hand, 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 41.4 per cent. Surprisingly in 2019/20, compensation of employees accounted for over half of the county total spending.

Reflecting on expenditures by functional classification (priority spending), the county spent a combined average of 70.0 per cent of the total expenditure during the period 2014/15 to 2020/21 on non-administrative services such health and sanitation services (27.8%); agriculture, water and livestock development (13.6%); lands, infrastructure, housing and urban development (10.4%); basic education, ICT, and youth development (7.2%); trade, cooperatives, and investments (3.7%); environment and natural resources (2.4%); Kitui Municipality (2.3%); tourism, sports and culture (1.7%); and Mwingi Town Administration (0.9%)

**Table 2.2: County departmental/ priority spending**

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Average	Average share in spending (%)
Health and Sanitation	1,575.8	1,545.9	1,987.0	2,491.8	3,179.0	3,454.0	3,238.8	2,496.0	27.8
Agriculture Water and Livestock Development	977.7	1,010.7	1,013.4	1,357.0	1,496.7	1,389.6	1,271.8	1,216.7	13.6
Office of The Governor	869.5	1,308.3	1,073.5	1,166.3	987.8	1,042.9	1,470.0	1,131.2	12.6
Lands, Infrastructure, Housing and Urban Development	1,161.8	996.0	868.7	777.9	1,104.8	727.4	919.5	936.6	10.4
County Assembly	57.6	728.7	687.1	722.6	811.2	876.4	787.8	667.3	7.4
Basic Education, ICT, and Youth Development	605.5	678.5	849.4	645.7	578.6	511.4	638.3	643.9	7.2
Administration and Coordination of County Affairs	264.8	535.1	407.4	426.2	333.6	401.6	391.4	394.3	4.4
County Treasury	273.8	260.5	325.5	458.1	373.2	381.4	519.6	370.3	4.1
Trade, Cooperatives, and Investments	238.5	249.2	288.8	272.5	276.1	502.6	526.8	336.3	3.7
Environment and Natural Resources	238.7	228.6	232.1	276.5	174.9	154.3	182.8	212.6	2.4
Kitui Municipality	-	111.7	276.5	253.0	235.4	304.0	276.6	208.2	2.3
Tourism, Sports and Culture	45.7	82.7	106.9	284.2	184.0	165.9	176.4	149.4	1.7
County Public Service Board	591.9	55.2	62.3	63.2	44.8	26.6	27.5	124.5	1.4
Mwingi Town Administration	-	79.7	136.1	125.0	87.6	72.9	83.2	83.5	0.9
<b>Total</b>	<b>6,901.3</b>	<b>7,870.6</b>	<b>8,314.6</b>	<b>9,319.9</b>	<b>9,867.7</b>	<b>10,011.1</b>	<b>10,510.5</b>	<b>8,970.8</b>	100.0

Data Source: Office of the Controller of Budget

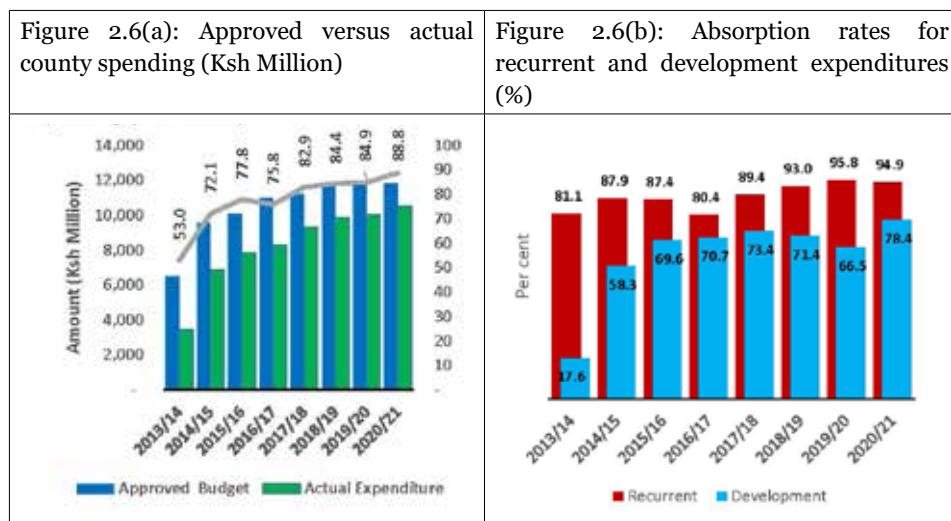
Further during the review period co-ordination and administrative functions accounted for a combined 30.0 per cent with office of the governor leading at 12.6 per cent followed by County Assembly at 7.4 per cent, Administration and Coordination of County Affairs 4.4 per cent, the County Treasury 4.1 per cent, while county public service board accounting for 1.4 per cent.

### **Effectiveness of County spending**

Total budget execution averaged 77.5 per cent in the period 2013/14 to 2020/21. In 2013/14 overall total budget execution stood at 53.0 per cent. This execution improved to 77.8 per cent in 2015/16 before taking a slight dip in 2016/17 to 75.8 per cent. At the end of 2020/21 budget absorption stood at 88.8 per cent meaning that in 2020/21 only Ksh. 10,510.5 million was utilized out of the approved budget of Ksh. 11,839.8 million (Figure 2.6).

With regards to development budget execution in the county, the average absorption rate between 2013/14 to 2020/21 was 63.2 per cent (implying that on average over 36.8 per cent of the development budget is not absorbed). This implies existence of shortfalls budget implementation, and the county to continue tightening budget implementation to ensure achievement of greater absorption rates to keep help 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 2.6: County approved expenditure and absorption rates**

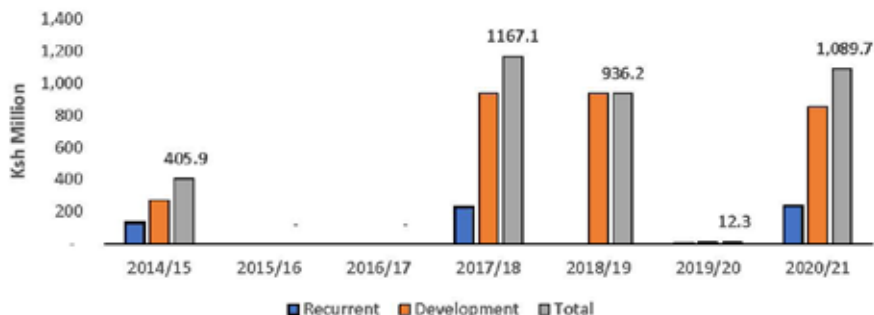


Data Source: Office of the Controller of Budget

### Pending Bills

In 2014/15 the county reported Ksh 405.9 million in pending bills. This increased to Ksh 1,167.1 million in 2017/18 with development spending related pending bills accounting for 80.2 per cent of this. In 2019/20 pending bills slowed to Ksh 936.2 million before shooting up to Ksh 1,089.7 million at the end of 2020/21, the second highest recorded since devolution. Generally, pending bills related to development have been greater than those related to recurrent expenditure on average accounting for 83.2 per cent of the pending bills portfolio. If pending bills for development were paid in their respective fiscal year, the execution of development budget in subsequent years would improve.

**Figure 2.7: 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 as well as 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.

### 2.3 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 the 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 programs 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 and Livestock account for a significant share of economic activity in Kitui County. More than a half of County economic activity is driven by the agriculture sector. In 2017, agriculture accounted for Ksh 41,799 million out of the total Ksh 101,560 million Gross County Product (GCP) amounting to 41.2 per cent of the County's GCP.

Over 80 per cent of the households in Kitui County practice farming. About 75.9 per cent of the households produce crops, 67.6 per cent produce livestock, 0.22 per cent practice aquaculture and about 0.33 per cent are involved in fishing. About 2.55 per cent of the households practice irrigation farming.

**Table 3.1: Distribution of households practicing agriculture, fishing and irrigation by County and Sub-County**

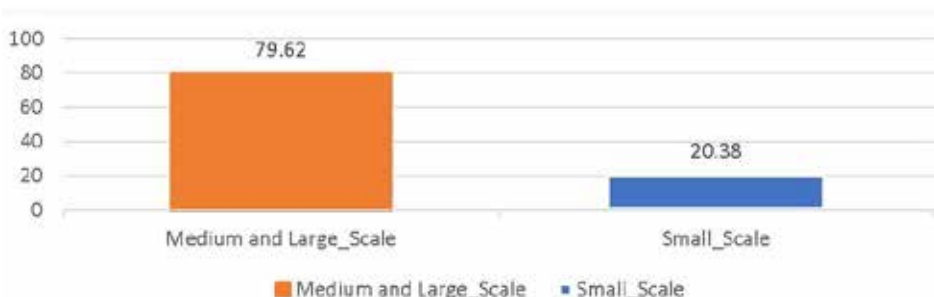
County/Sub County	Total Households	Farming Households	Crop Production	Livestock Production	Aquaculture	Fishing	Irrigation
Kenya	12,143,913	6,354,211	5,555,974	4,729,288	29,325	109,640	369,679
Kitui	262,942	215,322	199,459	177,701	570	863	6,716
Ikutha	16,679	14,236	12,055	12,419	29	62	582
Katulani	12,170	10,717	10,312	8,313	29	39	327
Kisasi	10,866	9,797	9,618	7,756	15	28	221
Kitui Central	29,057	17,146	16,227	11,892	47	73	484
Kitui West	17,497	15,208	14,688	12,411	21	52	262
Kyuso	15,993	14,021	12,646	12,287	37	65	500
Lower Yatta	15,454	12,281	11,395	10,349	76	78	618
Matinyani	11,513	10,531	10,247	8,314	17	27	376
Migwani	19,096	17,012	16,281	14,237	27	66	326
Mumoni	6,496	5,646	5,185	4,876	12	27	126
Mutitu	11,521	9,766	8,461	8,551	39	44	348
Mutitu North	4,929	4,303	3,966	3,668	12	12	92
Mutomo	23,044	19,832	18,506	16,780	54	60	652
Mwingi Central	26,753	19,371	17,344	16,408	60	61	793
Mwingi East	18,730	15,945	14,231	13,810	27	55	350
Nzambani	11,276	9,189	8,728	6,611	13	42	394
Thagicu	3,289	2,968	2,620	2,723	4	30	51
Tseikuru	8,579	7,353	6,949	6,296	51	42	214

*Source: 2019 Kenya Population and Housing Census*



On the scale of production, the FAO criterion on land size is used to identify small holder farmers as those producers that “fall in the bottom 40 per cent of the cumulative distribution” (Khalil et al., 2017). Using this criterion, about 20.4 per cent of the farming households in Kitui County are “small-scale” farming with a land holding of 0.675 or less acres of land.

**Figure 3.1:** Scale of Operation: % of households



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

The County is classified in the semi-arid uplands agro-ecological zone as per the Agricultural Sector Transformation and Growth Strategy (ASTGS) 2019-2029, suitable for suitable for dryland crops such as sorghum and pigeon peas, and beef cattle. An overall analysis of the County agricultural production indicates among the top food crops produced by households in Kitui include maize, green grams, beans, sorghum, millet, cassava kales, watermelons, bananas and sweet potatoes.

**Table 3.2: Distribution of households growing crops by type, County and Sub-County**

County/Sub County	Kitui	Ikutha	Katu-lani	Kisasi	Kitui Central	Kitui West	Kyuso	Lower Yatta	Matinyani	
Maize	178,635	11,519	10,218	9,452	15,951	14,528	8,649	11,247	10,104	
Green grams	133,390	10,007	5,744	6,861	4,553	7,066	10,710	8,227	4,150	
Beans	105,815	2,705	8,454	5,605	13,599	13,917	2,600	8,902	9,620	
Sorghum	98,030	7,331	1,976	4,226	3,334	4,148	10,300	3,502	2,111	
Millet	60,988	4,464	252	556	730	430	8,956	691	161	
Cassava	35,623	1,269	2,224	2,311	5,857	3,739	1,076	1,185	2,966	
Kales	19,725	1,265	937	902	2,191	1,062	836	1,524	1,618	
Watermelons	17,724	1,767	271	448	412	242	2,412	570	157	
Bananas	16,923	354	845	634	3,958	2,355	319	888	1,623	
Sweet Potatoes	15,210	674	1,336	1,294	2,060	1,410	224	1,233	1,327	
Tomatoes	8,600	451	514	547	963	434	403	681	499	
Onions	5,648	274	299	360	610	379	293	525	335	
Sugarcane	3,959	135	144	120	1,063	315	167	178	260	
Cotton	2,711	99	29	74	105	35	650	87	25	
Cabbages	1,330	82	55	78	171	89	60	100	81	
County/Sub County	Migwani	Mumoni	Mutitu	Mutitu North	Mutomo	Mwingi Central	Mwingi East	Nzambani	Thagicu	Tseikuru

Maize	16,066	3,538	7,928	3,889	18,067	16,328	10,679	8,618	311	1,543
Beans	14,899	1,549	482	846	3,898	10,494	1,984	6,075	43	143
Green grams	9,685	4,536	6,909	3,265	15,363	12,640	11,385	3,606	2,394	6,289
Sorghum	4,482	4,499	5,245	2,244	11,975	10,483	10,592	3,224	2,127	6,231
Cassava	4,481	630	856	323	2,664	2,220	606	2,743	21	452
Bananas	2,235	110	403	163	581	812	180	1,308	62	93
Sweet Potatoes	1,640	154	438	108	1,192	839	116	1,113	7	45
Kales	1,245	345	911	469	1,618	1,872	1,023	1,397	48	462
Millet	882	4,403	4,657	1,648	7,983	6,105	9,718	756	2,364	6,232
Tomatoes	631	113	439	149	627	918	257	738	38	198
Water-melons	510	620	1,193	475	1,967	1,339	2,389	434	219	2,299
Sugarcane	413	38	146	42	186	324	84	226	29	89
Onions	412	68	338	114	482	423	151	465	13	107
Cabbages	84	19	72	23	99	114	45	102	16	40
Cotton	69	146	51	21	103	86	74	161	175	721

Source: 2019 Kenya Population and Housing Census

**Key permanent crops among households in Kitui include Mangoes.**

**Table 3.3: Distribution of households growing permanent crops by type and County**

County	Avocado	Citrus	Mango
Kitui	12,066	7,510	35,471
Kenya	966,976	177,445	796,867

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 Kitui's value of fruits production in 2019 amounted to Ksh 2.1 billion. The area under fruit was 4,214 Ha with a production of 88,990 MT. The major fruits grown in order of value importance are mango, watermelons, pawpaw, yellow passion and oranges.

**Table 3.4: Fruits grown in Kitui County**

Type of Fruit	Area in Ha	Production in Tons	Value in Shillings
Mango	2,646	52,270	1,054,240,000
Watermelons	664	19,250	342,300,000
Pawpaw	336	5,510	208,300,000
Yellow Passion	102	2,550	127,500,000
Oranges	100	2,000	117,000,000
Avocado	204	4,080	105,350,000
Purple Passion Fruits	42	1,050	83,500,000

Banana	82	1,440	28,800,000
Lemons	22	440	12,875,000
Sweet Melons	16	400	8,000,000
<b>Total</b>	<b>4,214</b>	<b>88,990</b>	<b>2,087,865,000</b>

Source: Agriculture and Food Authority, 2019

In 2019, the value of vegetables production in the County amounted to Ksh 1.6 billion. The area under vegetables was 6,884Ha with a production of 67,768MT. The major vegetables grown in order of value importance are; tomato, cowpea and kales.

**Table 3.5: Vegetables grown in Kitui County**

Type of Vegetables	Area in Ha	Production in Tons	Value in Shillings
Tomato	715	20,443	855,400,000
Cowpea	4,751	15,769	315,380,000
Kales	1,224	24,920	265,051,600
Spinach	165	5,995	134,200,000
Pumpkin Fruit	29	641	21,100,020
<b>Total</b>	<b>6,884</b>	<b>67,768</b>	<b>1,591,131,620</b>

Source: Agriculture and Food Authority, 2019

In 2019, the value of MAPs production in the County amounted to Ksh 214.5 million. The area under MAPSs was 137 Ha with a production of 3120MT. The major MAPs grown are Bulb Onions.

**Table 3.4: Medicinal and Aromatic Plants (Maps) grown in Kitui County**

Medicinal and Aromatic Plants (MAPS)	Area in Ha	Production in Tons	Value in Shillings
Bulb Onion	137	3,120	214,500,000

Source: Agriculture and Food Authority, 2019

Being an ASAL County, animal production is a key economic activity in Kitui County. Other than rearing the traditional livestock (i.e. goats, cattle, and sheep), the County has promoted poultry production, donkey keeping and bee keeping (apiculture) among farming households in the County. A lower percentage of farming households practice aquaculture.

**Table 3.6: Distribution of households rearing livestock and fish by County and Sub-County**

County/Sub County	Kitui	Ikutha	Katulani	Kisasi	Kitui Central	Kitui West	Kyuso	Lower Yatta	Mati-nyani	Migwani
Goats	149,306	10,912	6,628	6,289	8,313	9,738	10,907	8,869	6,297	11,927
Indigenous Chicken	147,023	10,106	7,172	6,524	9,795	10,827	9,791	8,461	7,272	12,272
Donkeys	103,497	8,639	4,233	4,129	3,397	6,165	9,089	6,395	3,504	6,759
Indigenous cattle	88,486	6,610	4,018	4,225	4,856	5,607	6,508	6,243	3,953	6,278
Beehives	30,134	3,044	444	708	689	357	3,253	1,890	329	1,418
Sheep	20,920	1,574	356	310	332	1,008	2,304	1,380	712	1,340
Exotic cattle -Dairy	3,865	287	205	135	561	313	195	379	286	216
Exotic cattle -Beef	3,016	237	174	109	254	135	241	313	206	150
Exotic Chicken Layers	3,016	239	178	87	329	107	248	286	183	127
Exotic Chicken Broilers	1,968	145	151	41	200	57	170	215	93	80
Rabbits	710	16	49	41	65	147	12	24	75	141
Fish Ponds	461	21	24	11	42	18	34	50	14	24
Camels	433	6	7	3	7	10	11	9	5	4
Pigs	175	14	7	9	14	11	10	7	8	13
Fish Cages	82	3	7	1	3	1	4	26	2	2
County/Sub County	Mumoni	Mutitu	Mutitu North	Mutomo	Mwingi Central	Mwingi East	Nzambani	Thagicu	Tseikuru	
Goats	4,472	7,372	3,181	14,496	14,598	12,054	5,131	2,464	5,658	
Indigenous Chicken	4,107	6,835	2,776	14,157	13,058	11,077	5,649	2,152	4,992	
Donkeys	3,345	5,873	2,158	10,818	10,481	9,688	2,065	1,697	5,062	
Indigenous cattle	2,513	4,160	1,892	9,601	7,504	6,853	3,034	1,350	3,281	
Beehives	1,184	1,954	1,075	3,774	3,494	3,736	787	405	1,593	
Sheep	1,132	991	149	1,717	1,526	824	290	1,547	3,428	
Exotic cattle -Beef	144	103	65	110	301	168	91	126	89	
Exotic Chicken Broilers	100	37	48	62	189	79	147	100	54	
Exotic cattle -Dairy	91	138	99	193	307	115	217	41	87	
Exotic Chicken Layers	74	116	90	166	287	153	158	94	94	
Fish Ponds	12	34	5	34	51	24	13	2	48	
Rabbits	7	8	5	15	37	10	50	3	5	
Pigs	3	8	5	19	17	10	9	5	6	
Fish Cages	-	5	-	5	9	3	1	2	8	
Camels	1	74	4	258	7	18	-	1	8	

Source: 2019 Kenya Population and Housing Census

The above characterization of farming households highlights the priority value chain opportunities in maize, green grams, beans, sorghum, millet, cassava, kales, watermelons, bananas, sweet potatoes, mangoes, pawpaw, yellow passion, oranges, goats, cattle, sheep,

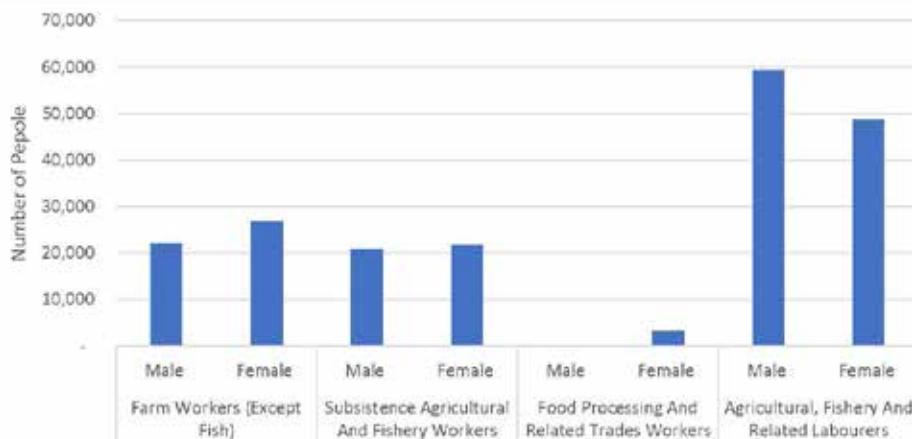
poultry production, donkey keeping and bee keeping (apiculture). With majority of the households farming the identified products, the current Kitui transformation strategy in agriculture should prioritize value chains in the identified areas to positively impact of households' livelihoods.

## Agri-Food Challenges in COVID-19

### i) Human capital/employment levels – by gender

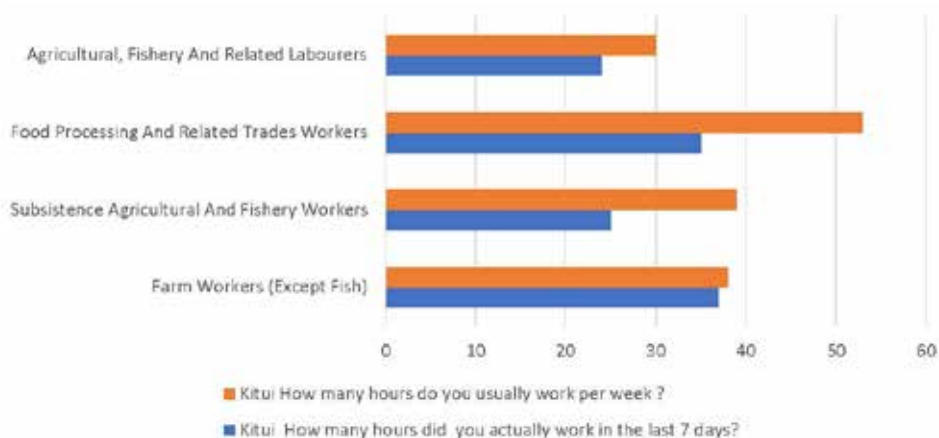
Agricultural labor participation in Kitui indicates relative parity between females and males with no strong dominance of either gender in the labor force. Majority of the population in Kitui are Agricultural, fishery and related labourers where the group covers: Farmhands and Related Labourers; Forestry Labourers; and Fishery, Hunting and Trapping Labourers. The classifications are based on the Kenya National Occupational Classification Standard (KNOCS).

**Figure 3.2: Agriculture related labour 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 by in agriculture related occupations indicates workers in all the identified sub-sectors worked fewer hours in the reference period as compared with the usual hours worked per week. The most affected workers are the food processing and related trades workers who recorded the highest difference of 18 hours between the usual and actual hours worked in a week. The occupations in this sub-major group include: Butchers, Fishmongers and Related Food Preparers; Bakers, Pastry-cooks and Confectionery Makers; Dairy Products Makers; Fruit, Nut and Related Preservers; Tobacco Preparers and Tobacco Products Makers; Food and Beverage Tasters; Brewers, Distillers and Related Workers ; and Other Food Processing and Related Workers.

**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.

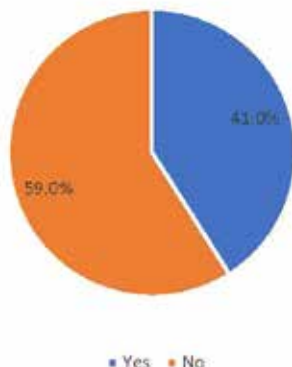
### **ii) Market operations**

Successful transformation of smallholder agricultural production in Kitui 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 market its commodities both in domestic, regional and international markets.

Among the marketing issues faced by the County is road access, a key indication of access to markets. Kitui's rural access index (RAI)- which measures "the number of rural people who live within two kilometers (typically equivalent to a walk of 20-25 minutes) of an all-season road as a proportion of the total rural population- fairs at 56 per cent. This is low compared to the national average of 69.3 per cent.

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, 41 per cent of the households in Kitui County indicated 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.

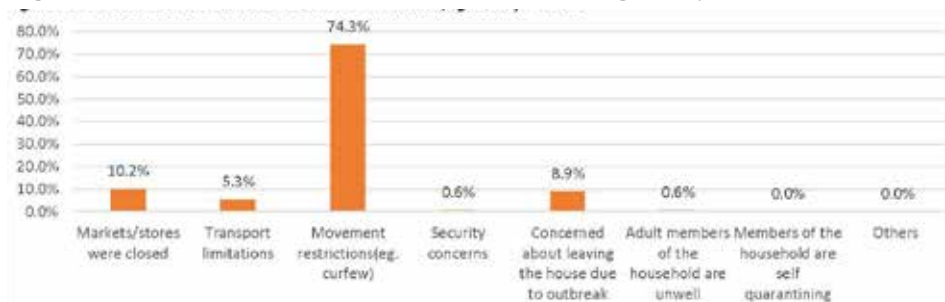
**Figure 3.4 Limited access to markets to purchase food items**



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 (74.3 per cent) and closure of the markets/grocery stores (10.2 per cent).

**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

Livestock trade has especially been majorly affected as traders are unable to take the livestock to the market.

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. 74 per cent of households in Kitui County indicated that food prices had increased over the past 2 weeks from the reference period, while 12 per cent indicated that they had not experienced a change in the prices.

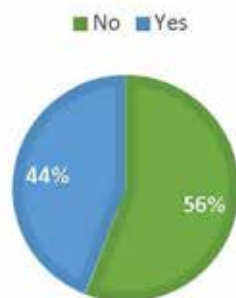
**Figure 3.6: Percentage of households experiencing change in food commodity prices**



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

On the magnitude of the price shocks, 44 per cent of the households indicated they faced a large rise in food prices in the past two weeks from the reference period.

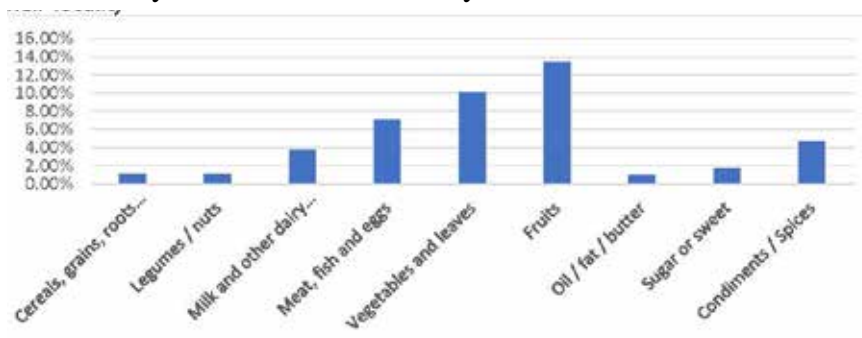
**Figure 3.7: Proportion of households facing large food price shocks**



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 table.

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



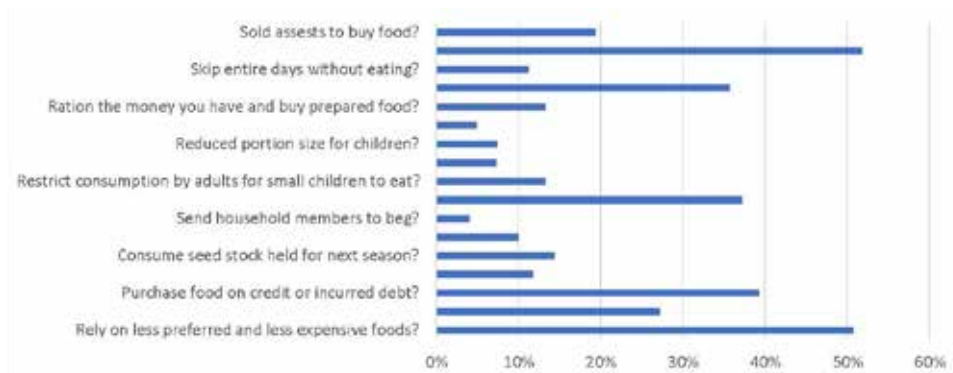
Source: KNBS Survey on Socio-Economic Impact of COVID-19 on Households-Wave 2



A key concern is that the food groups affected most are the nutritious food categories- fruits, vegetables, meat and milk-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 decreased buying some non-food products (51.7%), relying on less preferred and less expensive foods (50.7%), purchase food on credit or incurred debt (39.3%), limit portion size at mealtimes (37.2%) and reduce number of meals eaten in a day (35.6%).

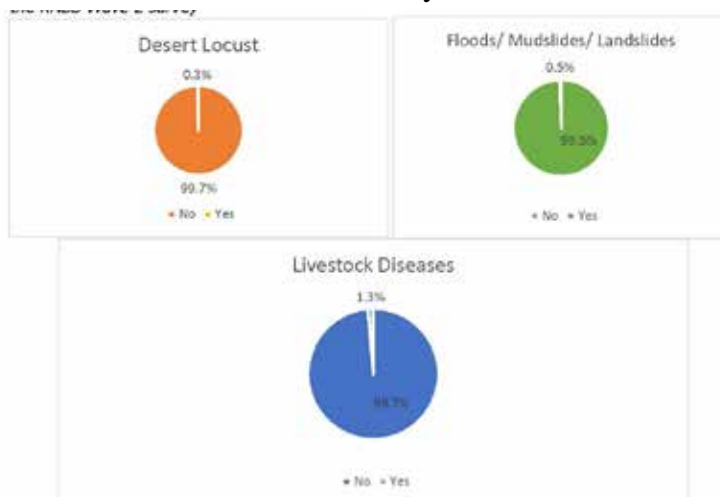
**Figure 3.9: Percentage of households where the following strategies were adopted for at least one day**



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

Additional challenges faced by the count, albeit at low levels include Desert locusts (0.3%); Floods/ Mudslides/ Landslides (0.5%); and Livestock Diseases (1.3%).

**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

Further effects of COVID-19 (experienced and anticipated) on food security and nutrition in the County include as reported by County officials include:

1. Urban – rural migration due to depressed sources of livelihoods in urban areas- this affected rural households’ food budgets and therefore depleting household food reserves leading to household food insecurity and malnutrition.
2. Disruption of food systems: -
  - Local markets were closed/ regulated/ relocated due to policies especially social distances to contain the virus and are operating below normal. There were also cases of harassment of the market players by law enforcers which people have been interpreting to mean that markets are allowed.
  - High cost of movement of persons and produce to markets (especially through PSVs) reduced produce supplies to the markets. Thus, commodity prices in the market skyrocketed especially those of the fresh produce. High cost of transport is likely to have hindered farmers from getting their produce to the market.
  - Increase in public transport made it difficult and expensive for the farmers to access farm inputs and consequently have negative effect on production.
  - External supplies to the local markets were depressed due to markets disruptions
3. Due to loss of livelihoods and income, families especially the urban poor lost their purchasing power. These households could not afford a decent meal in face of rising food prices.
4. Households relying on remittance to purchase food from their employed family members in urban areas became food and nutrition insecure due to job losses
5. Long term closure of schools and tertiary institutions due to COVID-19, made children stay at home thus increasing family food budget. This depleted household food reserves.
6. Social distancing and no public gathering policies discouraged holding of barazas, farmers’ trainings, field days and demonstrations. This reduced interactions between the farmers and extension service providers.
7. In worst case scenario-If the pandemic become severe or continue over a long period of time, there were likely to be more serious disruptions that may have further reduced food availability in the markets over the medium and long term. The disruptions would occur either as a result of producers themselves becoming ill or because of disruptions to markets due to policies to contain the virus, and the resulting weakened capacity to produce, transform and transport food.

## **Agri-Food Constraints Faced in the County**

Among the Key Constraints the County faces include:

- a) Water scarcity affecting farm and livestock productivity
- b) Variable and extreme weather events which have increased in frequency and intensity over the years adversely affecting livestock and crop production
- c) Dependence of rain fed agriculture despite frequency in extreme climate conditions, such as drought episodes and delayed and erratic rains
- d) Low access to crucial off-farm services including extension, climate and market information, and credit and insurance services.
- e) Poor and inadequate infrastructure affecting marketing activities. For instance, the County had comparatively low road networks in comparison to other counties, critical for access to input and output markets
- f) Pests and livestock diseases affecting agricultural and livestock productivity.
- g) Farmers low access to quality and affordable inputs including certified seeds, water, animal feeds, artificial insemination (AI) services, fertilizers, livestock vaccination and mechanized ploughing services by County tractor hire services
- h) Inadequate finances and efficient marketing opportunities necessary for improved incomes
- i) Low commercialization of farming where majority of farmers practice farming for subsistence purposes and as a hobby rather than a business. One way is through adoption of high value cash crops (Green grams, cotton and macadamia).
- j) Low adoption of high value crops that would increase farmers returns
- k) Slow uptake of digital platforms to market agricultural produce.
- l) Lack of storage and low agro-processing and value addition capacities among small scale farmers leading to farm losses and post-harvest waste.

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

### **3.2 Opportunities with COVID-19 in Agriculture Sector**

An assessment of the sector linkages to other sectors highlights that the sector is enabled by:

- Businesses/ MSMEs: Businesses and MSMEs are crucial in providing inputs and requirements to the agricultural sector. The sector would facilitate the efficient access to
- Transport, Storage and ICT sectors
- Financial and insurance activities

- Accommodation and food services
- Manufacturing: The manufacturing sector plays a crucial role in agro-processing. Agricultural inputs also contribute to the processing of other manufacturing commodities

The County has opportunities in:

- a) Developing County-private partnership in enhancing agro-processing and value addition and Linking farmers to product markets
- b) Strengthening farmers' associations and cooperatives as an additional solution to marketing challenges
- c) Development of marketing infrastructure including roads
- d) Investment in Storage and cooling facilities to reduce post-harvest losses
- e) Uptake of digital platforms to build capacities of farming households in modern agricultural technologies
- f) Expand/ exploit innovative marketing opportunities for farmers produce including uptake of innovative marketing platforms so that farmers are not exploited by middlemen.
- g) Scaling up conservation agriculture, post-harvest management, planting drought-tolerant and early maturing varieties, and agro-forestry.
- h) Enhanced water harvesting, sustainable and efficient irrigation.
- i) Increased livestock production through: - routine vaccination, deworming and vector control to maintain animal health; decentralized veterinary services; disease surveillance; storing and conserving pastures and fodder; capacity building on animal management and training on preservation and value addition techniques.
- j) Adoption of natural resource management to include soil and water conservation, tree planting, changing of crop type and water harvesting.
- k) Enhance supportive services to include early-warning systems, insurance and credit, extension advisory and information services through extension and training.
- l) Boosting agricultural productivity by strengthening farmers access to input supply such as certified seeds and fertilizer, vaccination, pesticides, and herbicides, and animal feeds
- m) Enhancing farmers technical capacities to act on advisory information received
- n) 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 productive capacity of farms 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 to:

- i) Intensive agro-processing and value addition capacities of the County particularly in meat, leather, horticulture, and bee keeping (apiculture) production in partnership with development partners.
- ii) Promote households' access to agricultural inputs. To enhance production in the County, there is need to enhance access to quality and affordable inputs including bee keeping tools and gears and containers for storage; certified seeds; water; animal feeds; artificial insemination (AI) services; fertilizers; livestock vaccination; and modernized agriculture mechanization such as ploughing services by County tractor hire services.
- iii) Invest in access roads to enhance linkage between farms and markets. Extensive rural road infrastructure plays a central role in provision of affordable access to both markets for agricultural outputs and modern inputs. Kitui's rural access index (RAI) is relatively low at 56 per cent compared to the national average of 69.4 per cent. There is thus need for the County to invest in access roads to enhance linkage between farms and markets. Other crucial market infrastructure includes lighting and water services to facilitate trade activities.
- iv) Invest in cold storage facilities, on-site cold storage and refrigerated vehicles to transport fresh produce and meat to markets in Kenya and abroad.
- v) Digitize the agri-food sector to enhance: - 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.
- vi) Establish programmes for surveillance of disasters, such as extreme weather conditions and livestock disease, at the County level equipped with relevant technical specialists and finances to effectively prepare, respond and prevent risks. There is also 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) Sustainable expansion of irrigation and water harvesting projects in the County to support livestock production, food crops and horticultural farming. The County also seeks to have cash crop farming (tomatoes, hoho, onions, watermelons) along the river banks for fresh farm produce. The County is also exploring opportunities for carrying out irrigation for a large-scale production. To support expansion

of sustainable irrigation, there is need to promote development of Irrigation Infrastructure and water harvesting technologies in the County.

- viii) Build the capacity of farmers in adoption of modern farming technologies and practices and adopt sustainable land management practices to minimize environmental degradation especially with plans to engage in riverine agriculture.
- ix) 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

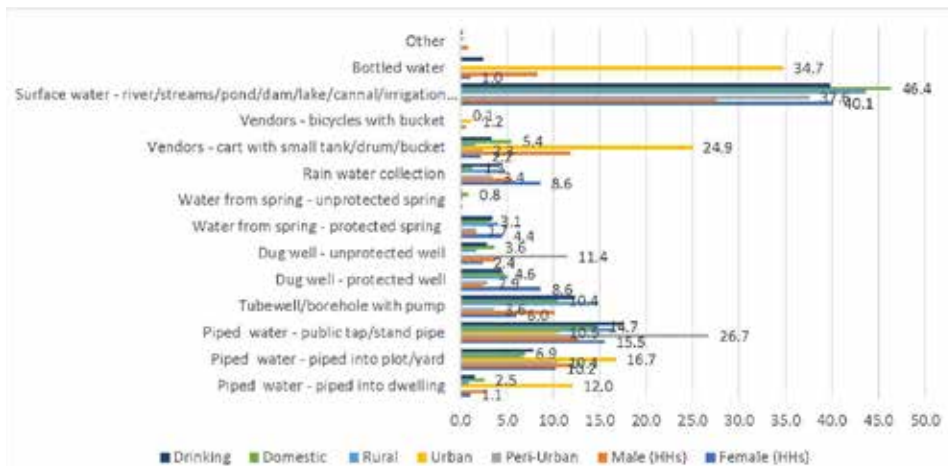
### 4.1 Characteristics of the Sector

Kitui County current water supply and demand using an average consumption of 50 liters per person in urban and 25 liters per person in rural areas stands at 32,176 cubic meters and 12,586 cubic meters respectively. The shortage in urban areas is even worse than in rural with access to piped water standing at 36.1 per cent urban and 41.1 per cent rural. Water management in Kitui is under KITWASCO which is primarily in charge of Kitui sub-counties and KIMWASCO Companies in charge of Mwingi sub-counties. KITWASCO oversees managing water supplies from the Masinga-Kitui water which is an inter-county project while KIMWASCO oversees the Inter sub-County project of Kiambere-Mwingi. The households in Kitui with access to improved and unimproved sanitation services stand at 56.8 per cent compared at a national average of 65.3 percent

#### *Access to source of water by households*

The major source of water for drinking utilized by households in the county is surface water (river/stream/dam/pond/lake) (39.8 per cent), piped water (public tap/standpipe) (17.5 per cent) tubewell/borehole with pump (12.3 per cent), water from dug well (unprotected) at (2.8 per cent) and spring water (protected) (3.4 per cent). Similarly, most rural (43.6 per cent) and peri-urban (37.6 per cent) uses surface water while most urban (34.7 per cent) population use bottled water.

**Figure 4.1: Access to water by households**



Source: KNBS 2015/2016

Combating 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. With the planned re-opening of schools and upcoming low rain seasons means that the pressure on water resources will be high, this therefore means that the demand for water will be high and if the supply will be 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 in schools from the school structure rooftops, supporting households in rainwater harvesting during rainfall times. Other interventions may include digging boreholes, supply of water to households that experiences water scarcity. Therefore, for equality in access to water the county government can waive or reduce the water bills for urban households who uses piped water as well as 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 into decision making in regard to water management and governance.

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

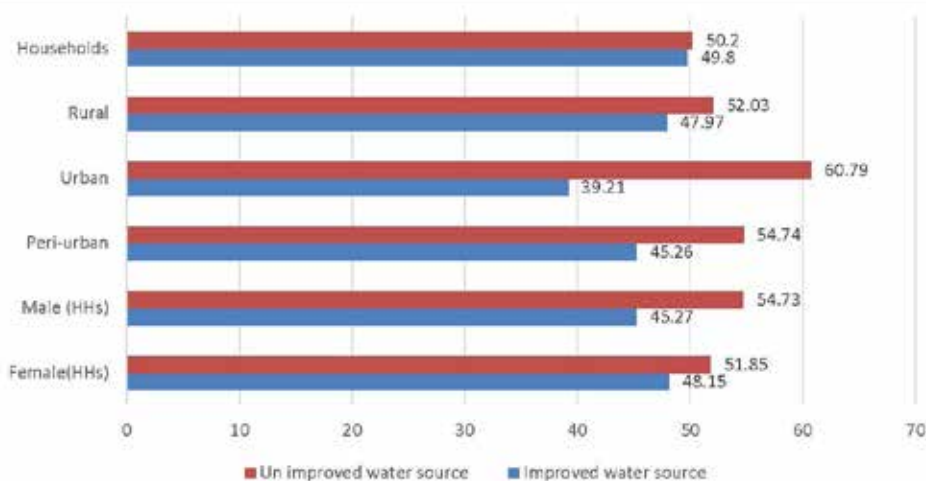
Clean and safe water is essential for good health and goes a long way in ensuring reduced infections. Access to improved sources of drinking water<sup>2</sup> is low in the county among households (49.8 per cent), this is also common among urban (39.2 per cent), rural (48 per cent). Similarly, both male and female headed households have access to improved drinking water source of water as shown in the figure below.

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<sup>2</sup> 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/stand pipe, Tubewell/borehole with pump, Dug well - protected well, Dug well - unprotected well, Water from spring - protected spring). Unimproved sources of water which include; Water from spring - unprotected spring, Rain water collection, Vendors - tankers-truck, Vendors - cart with small tank/drum/bucket, Vendors-bicycles with bucket, Surface water river/streams/pond/dam/lake/cannal/irrigation channel Bottled water. This is according to WHO and UN classification of sources of water



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



Source: KNBS 2015/2016

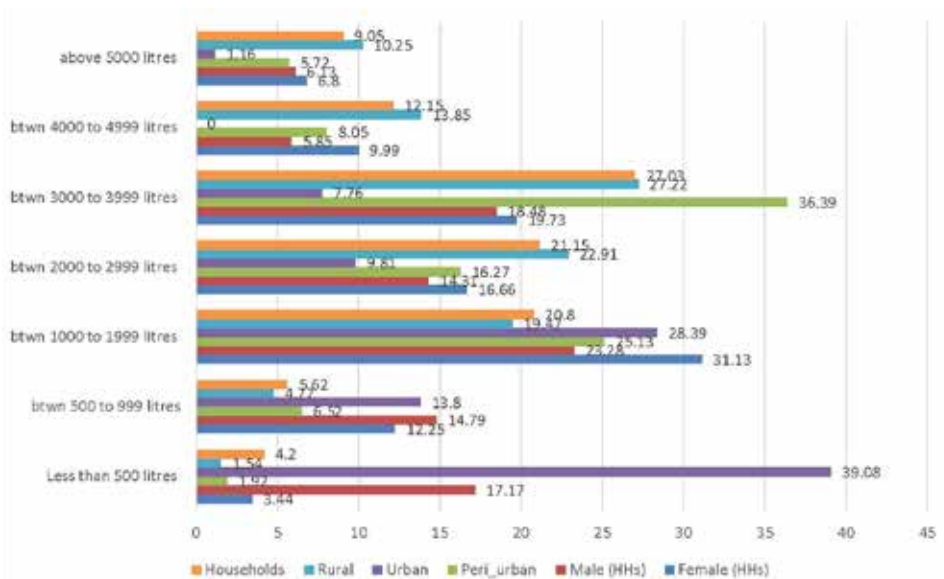
Inequalities in access to safe and clean drinking water may put households at risk of contracting infectious diseases as well as make the households less observance of COVID-19 measures of hand hygiene. One mitigation measure that may be undertaken by the county to increase access to improved water source, include connecting the households with piped water, increase the development of improved sources of water especially in rural areas. Long term measure to support access to water 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.

Other important consideration is to have separate water drinking point for livestock, different from the household water drinking water sources to minimize water contamination as well as conflict over water resource. Other long-term measures are to avoid agricultural activities along the upstream to minimize water pollution.

#### **Volumes for water used by households in a month**

Most households (27 per cent), rural (27.2 per cent) urban (7.8 per cent) and peri urban (36.4 per cent) used between 3000 to 3999 litres of water per month. Additionally, majority of male (23.3 per cent) than female (31.1 per cent) headed households uses between 1000 to 1999 litres of water in a month.

**Figure 4.3: Volumes of water used by households a month**

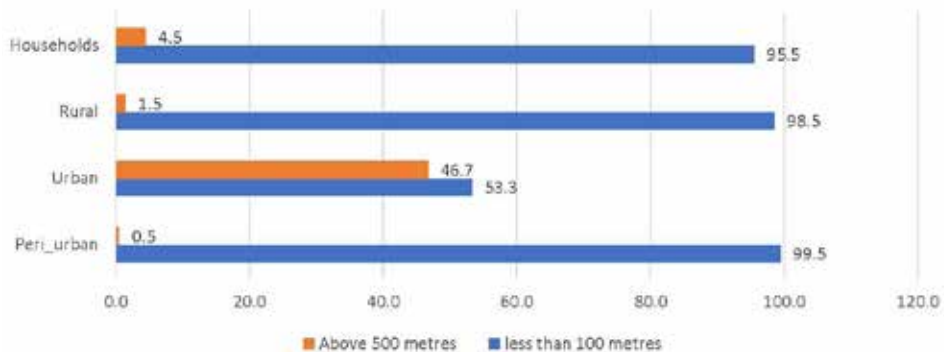


Source: KNBS 2015/2016

**Distance covered to water source and average time spend to and from the water source**

Majority of the households (95.5 per cent), rural (98.5 per cent), urban (53.3 per cent) and peri urban (99.5 per cent). urban and peri-urban covers less than 100 metres meaning they have water within their premises or close to their compounds. Only a small portion of households (4.5 per cent) covers more than 500 metres to water sources.

**Figure 4.4: Access to water sources distance and time**



Source: KNBS 2015/2016

If water is available to households, schools, health institutions within the shortest distances possible, it easily encourages observing hand hygiene thus minimizing infections. In

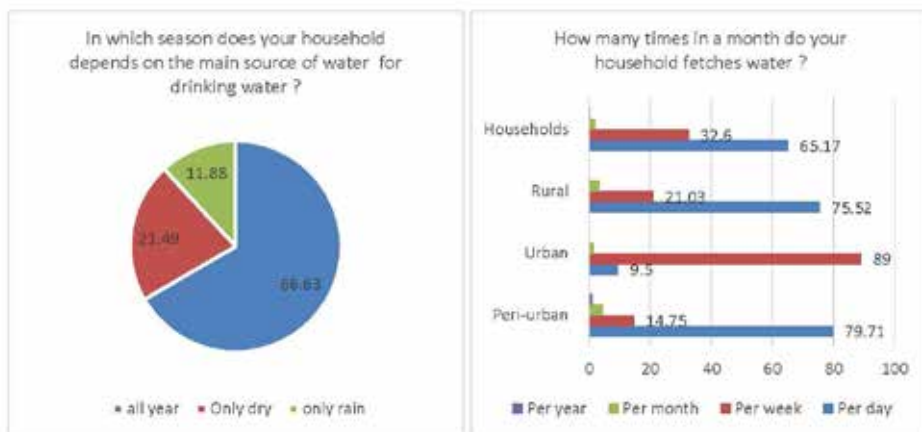
learning institutions, it minimizes rates of school dropouts among girls. Women headed households are disadvantaged in access to drinking water within shortest distances and this may make them vulnerable to contracting COVID-19 as well as other infectious diseases. To support hand hygiene among households there is need to have water supply closer to households headed by women.

**Access and reliability of water sources**

Majority of households (66.6 per cent) in the county relies on the main source of drink water all year round, Most households (65.2 per cent), rural (75.5 per cent), urban (9.5 per cent) and peri-urban (79.7 per cent) must go to fetch drinking water from the sources per day. This means there may be more of interactions with other household members in areas where water sources are shared, this may lead to increase on infections of COVID-19 where COVID-19 guidelines of social distance and avoidance of crowded place may not be observed.

It also implies that households may not be having water storage facilities that can minimize number of trips to water points in a day, therefore they may be at risk of water shortages during dry months.

**Figure 4.5: Access and reliability to water sources by households**



Source: KNBS 2015/2016

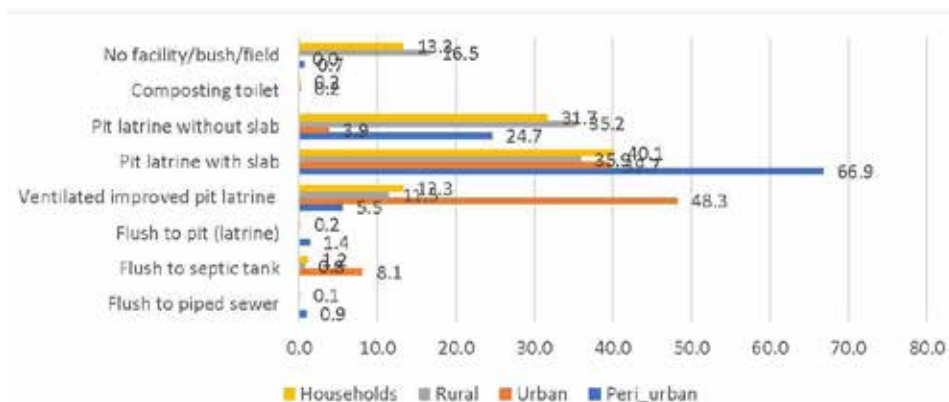
Source: KNBS 2015/2016

Top interventions are protection of the existing major water sources for households and development of new water sources, this may include rainwater harvesting at individual and institutional level. Protection of water catchment areas.

**Access to sanitation**

Majority of the households (40. Per cent), rural (35.9 per cent), urban (39.7 per cent) and peri-urban (66.9 per cent) uses pit latrine with slab, on the other hand, most of urban (48.3 per cent) households uses ventilated improved pit latrine. Additionally, there are proportions of households (13.3 per cent), rural (16.5 per cent) that have no toilet facility, this is more in rural areas.

**Figure 4.6: Access to sanitation in the county**

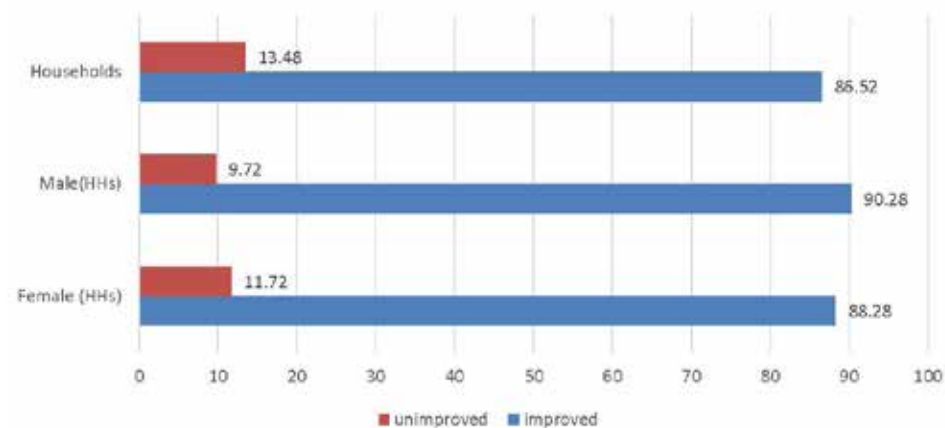


Source: KNBS 2015/2016

**Access to improved and unimproved sanitation**

Majority of the households (86.5 per cent), both male (90.3 per cent) and female (88.3 per cent) headed households have higher to access to improved sanitation facilities<sup>3</sup>

**Figure 4.7: Access to improved and unimproved sanitation by households**



Source: KNBS 2015/2016

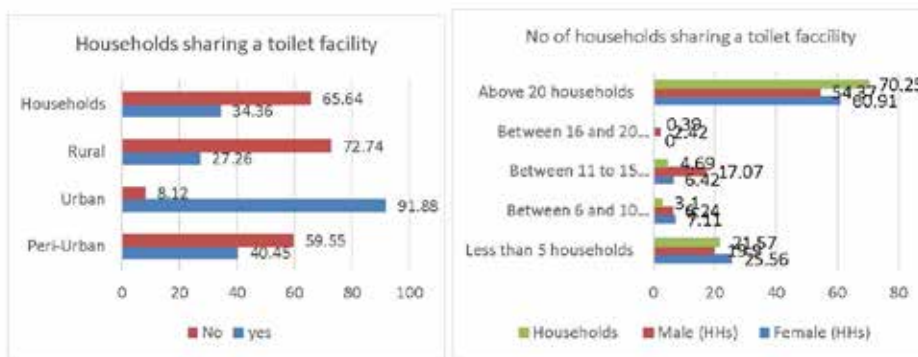
Access to improved sanitation is very important in maintaining hygiene and keeping infectious diseases away, good sanitation can help to detect the genetic residues of diseases in wastewater as those who are infected are thought to shed traces of the virus in faeces thus prompting for immediate action from the health officials.

<sup>3</sup> 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

### Sharing of a toilet facility

Additionally, most of the households (34.4%) both rural (72.7%) urban areas (91.9%) do share a toilet facility with other households. On the other hand, there are large proportions of households (70.3%) male (54.4%) headed female (60.9%) headed households who share a toilet facility with 20 other households. Only a small proportion of households do share a toilet facility with less than 5 other households at 21.6 per cent.

**Figure 4.8: Number of households sharing a toilet facility**



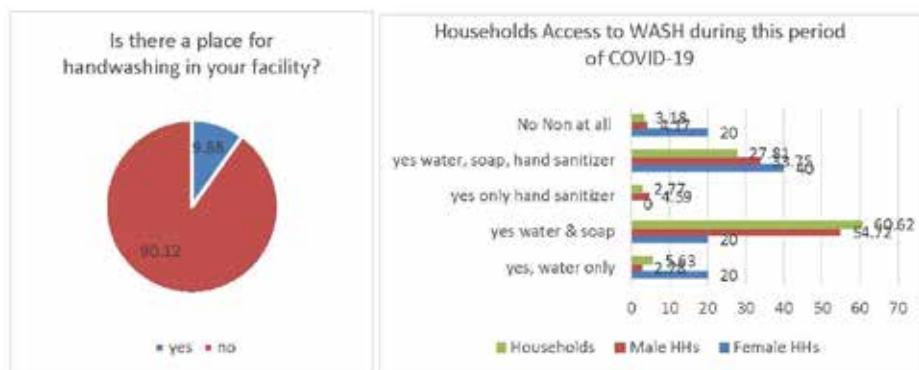
Source: KNBS 2015/2016

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 as well as social distancing measures. Similarly, 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

WASH has been identified very important in helping to curb transmission of infectious diseases, despite this, most households (90.1%) in the county do not have a handwashing facility in their households. Further most households (60.6%), male (54.7%) and female (20 per cent) headed households have access to WASH (Water and soap) during this period of COVID-19. Additional 27.8 per cent of the households have access to both water, soap, and hand sanitizer, this is more among male (33.8%) and female (40%) headed households. 20 per cent of female headed households do not have access to water, soap nor hand sanitizer.

**Figure 4.9: Access to wash during the COVID-19 period**

Source: KNBS 2015/2016

Source: KNBS COVID-19 Wave II, 2020

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 WASH

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

## 4.3 Emerging Issues

- Kitui is a very vast county and therefore efforts are made to ensure each household has a water point. Dams will be constructed by September continuous construction of boreholes to shorten the distance people take to access water and health.
- The county has established washing points where the county has provided water tanks, soaps and sanitizers especially in markets, hospitals and public places.
- The county has ensured supply of water in all places within the county

## 4.4 Recommendations

The recovery strategy recommends the following strategies for implementation:

- Increase water supply in households, institutions, and public places through drilling of boreholes in all the sub-counties. Currently access to water sources in county is above average but diminishes in times of reduced rains and drought. Lack of access to water will lead to households unable to observe hand hygiene thus making vulnerable to contract COVID-19. To increase access to water the county government can partner with private sector, donor agencies, local communities, and NGOs to help develop water infrastructure.

- ii) Expand and rehabilitate the existing piped water connection infrastructure to help increase access to water. There is low access to piped water which stands at 13.1 per cent in urban areas, 18.4 per cent in peri-urban and 8 per cent in rural areas. This means low revenue from piped water for the county government. Similarly, it also implies low access to clean and safe water which is guaranteed through piped water system. The county government can collaborate with the private sector, Non-Governmental organization and the local community to expand the water infrastructure.
- iii) Reclaim land forest land and water catchment land that's under encroachment
- iv) The county to support afforestation by providing tree seedlings to communities, schools and households.
- v) The county to implement its policy on environment and natural resources conservations
- vi) Strengthen community forest associations
- vii) The county to increase water supply in households, institutions, and public places through drilling of boreholes in all the sub-counties. Access to improved sources of water in rural areas is 48 per cent, 39.2 per cent urban and 45.3 per cent peri urban.
- viii) Expand sewer infrastructure to accommodate more households, currently there is low connectivity of households to piped sewer which is 8 per cent in urban and less than 1 per cent both in rural and peri-urban areas. Low connectivity to piped sewer denies the county the much-needed revenue from sanitation services as well as access to safe sanitation.
- ix) Improve access to safe and improved sanitation<sup>4</sup> in schools, health care facilities, workplaces, and public places. Additionally, sharing of a toilet facility with other households is common which stands at 27.3 per cent rural, 91.9 per cent urban and 40.5 per cent peri-urban. Similarly, 16.5 per cent of households do not have a toilet facility. Toilet sharing puts households 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 between county government, national government, development partners and PPP to expand sewer infrastructure and to accommodate more households.
- x) The county to promote awareness on proper hygiene and sanitation
- xi) Provide maximum protection to employees working in water and sanitation through provision of personal protection equipment
- xii) Promote the importance of handwashing and construct WASH facilities to increase access at the household level. Currently access to WASH is high among households with majority having access to water and soap at 60.6 per cent, water soap. On the other hand, 90.1 per cent of the households do not have a designated handwashing facility

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<sup>4</sup> Improved sanitation include the following -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) while access to unimproved sanitation include composting toilet, bucket toilet, hanging toilet/hanging, no facility/ bush/field, others. This is according to WHO and UN classification of sanitation

in their households. This may compromise hand washing hygiene of households thus making households vulnerable to contracting COVID-19. There is need for collaboration between County Government, Non-Governmental Organizations, local community, and the media to support implementation of WASH.

- xiii) Enforce the WASH regulations of having toilets in all public facilities such as supermarkets, hotels, and banks etc.
- xiv) The county to organize sensitization forums on the importance of handwashing through the media and in community forums



## 5 Manufacturing, Trade and MSMEs

### 5.1 Characteristics of the Sector

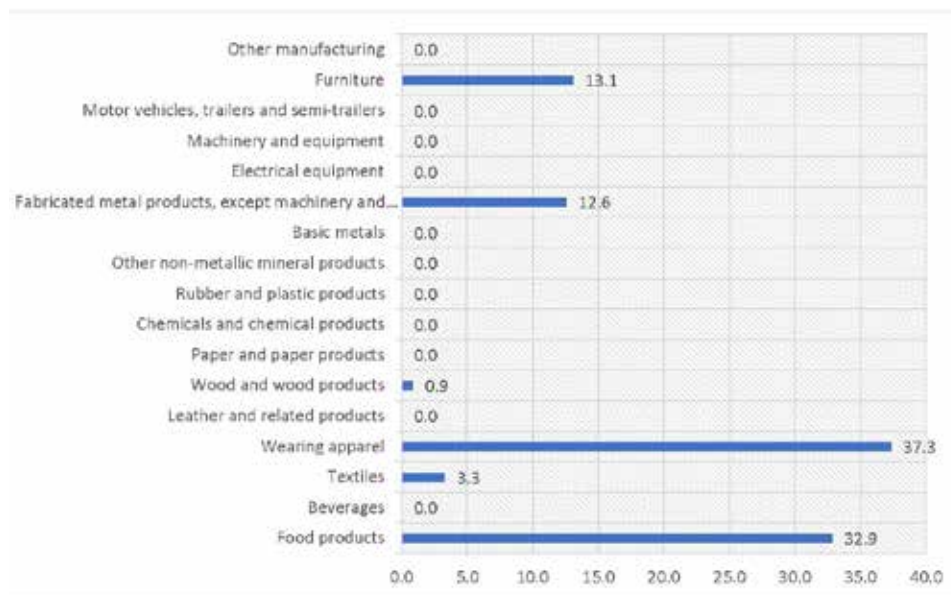
#### a) *Manufacturing sector*

Kitui County has 2,826 establishments involved in manufacturing activities which comprise 11.8 per cent of a total of 23,928 firms (KNBS, 2016) and all of them are micro in size. The main drivers of the economy of the County include services (53 per cent), agriculture (41 per cent), and manufacturing (0.1 per cent) (GCP, 2019).

#### *Sector of operation*

The KNBS, 2016 survey identifies the key sub-sectors that drive manufacturing in Kitui County to include: wearing apparel (37.3%), food products (32.9%), furniture (13.1%), fabricated metal products, except machinery and equipment (12.6 per cent), and textiles (3.3 per cent) (Figure 5.1). These are sub-sectors that are considered essential in dealing with COVID-19 are likely to experience increased activity with focus on food production, production of Personal Protective Equipment (PPEs) and hospital beds. The key products useful in value addition and driving manufacturing include livestock and skins and hides processing; and crops such as green grams, cow peas, maize, tomatoes, bananas, watermelons, kales, spinach, pawpaw, onions and mangoes, tomatoes, maize, beans, and kales. The industries and factories driving manufacturing sector in the County are involved in production and processing of honey, mangoes, poultry, leather, garment making and Ndengu.

**Figure 5.1: Sector of operation in manufacturing**

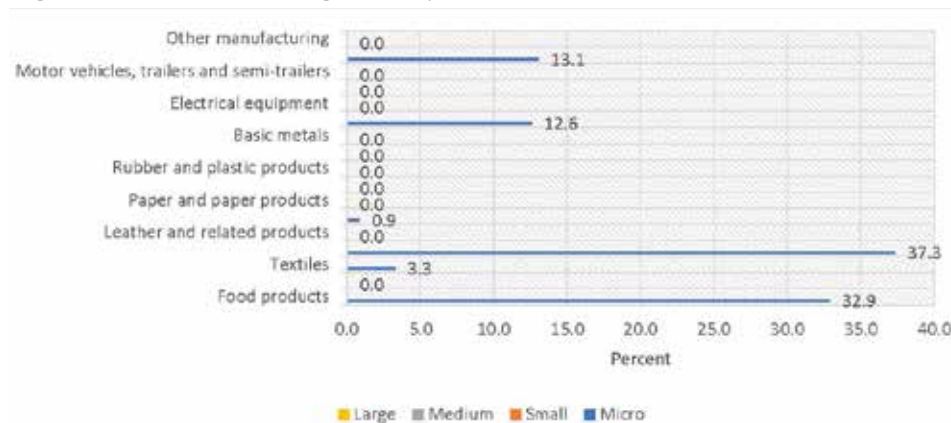


Source: KNBS (2016)

**Sector of operation by size**

Nearly all the establishments in Kitui County are micro in nature and operate in the wearing apparel (37.3%), food products (32.9%), furniture (13.1%), fabricated metals, except machinery and equipment (12.6%), and textiles (3.3%) (Figure 5.2).

**Figure 5.2: Manufacturing firms by sector and size**

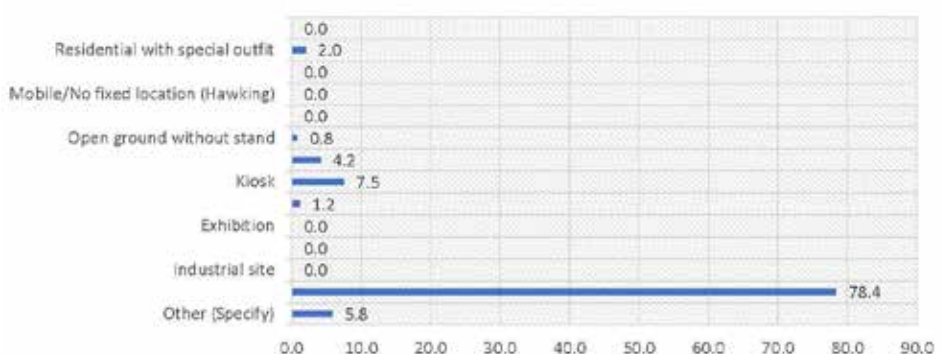


Source: KNBS (2016)

### Location of manufacturing firms by type of premises

The common premises used by manufacturing firms in Kitui County are commercial (78.4%), kiosk (7.5%), open ground with stand (4.2%), and residential with special outfit (2%) (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 Kitui County are mainly owned by female (51.3%), with males comprising 40.1 per cent while 8.6 per cent are jointly owned. All firms in the County are micro-sized with 51.3 per cent being female owned, 40.1 per cent male owned and 8.6 per cent jointly owned (Table 5.1).

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

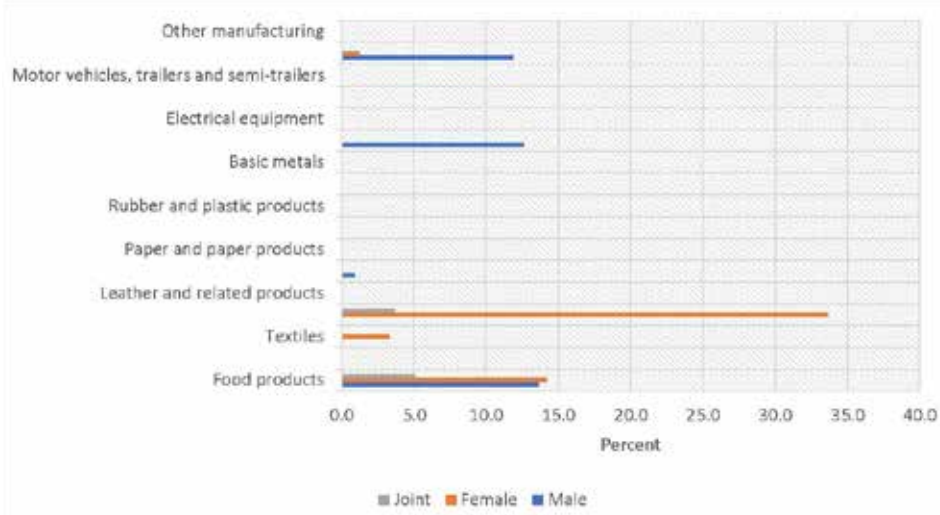
Gender	A11	Micro
Male	1,134 (40.1)	1,134 (40.1)
Female	1,450 (51.3)	1,450 (51.3)
Joint	243 (8.6)	243 (8.6)
Total	2,826 (100)	2,826 (100)

Source: KNBS (2016)

### Distribution of Manufacturing firms by gender and sector

Majority of the sub-sectors in manufacturing in the County are male dominated including food products (13.6%), and fabricated metal products except machinery and equipment (12.6%). Females are mostly found in the wearing apparel (33.6%) food products (14.2%), and textiles (3.3%) (Figure 5.4).

**Figure 5.4: Distribution of manufacturing firms by gender and sector**



Source: KNBS (2016)

In terms of employment, the manufacturing sector employs more men (61.6%) than women (38.4%). All men are found in the micro-sized enterprises (61.6%). Similarly, all women are also in the micro enterprises (38.4%) (Table 5.2).

**Table 5.2: Employment by gender and size for manufacturing firms**

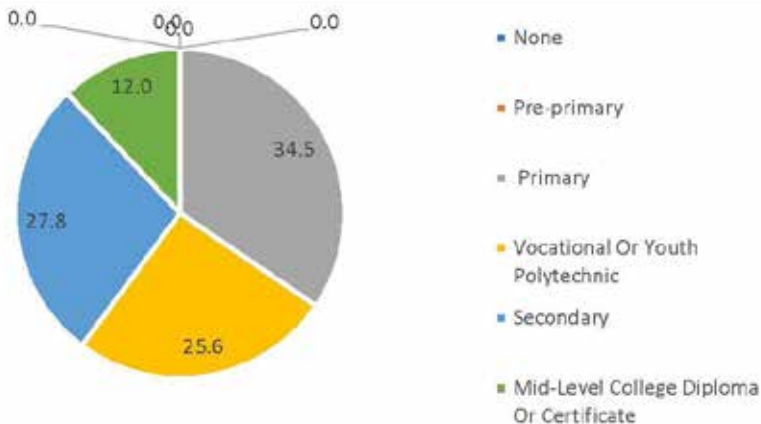
Number of employees	Micro	Total
Male	2,687 (61.6)	2,687 (61.6)
Female	1,673 (38.4)	1,673 (38.4)
Total	4,359 (100)	4,359 (100)

Source: KNBS (2016)

**Education levels of Manufacturing firm owners**

Majority of owners of firms in manufacturing have primary (34.5%), secondary (27.8%), vocational or youth polytechnic (25.6%), and mid-level college diploma or certificate (12 education (Figure 5.5).

**Figure 5.5: Education levels of manufacturing firm owners**

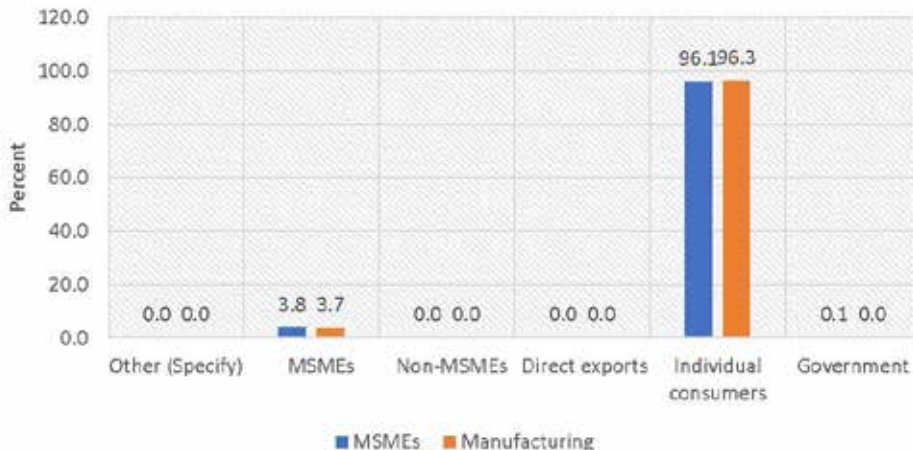


Source: KNBS, 2016

**Source of markets**

Majority of manufacturing enterprises and MSMEs in general rely on individual consumers for markets at 96.3 per cent and 96.1 per cent respectively (figure 5.6). They also both depend on MSMEs as a source for their markets. Firms in manufacturing and MSMEs in Kitui County do not depend on external markets for their products/services. Hence, shocks in the international markets, and especially as a result of COVID-19 may not have major effects on them.

**Figure 5.6: Source of markets**



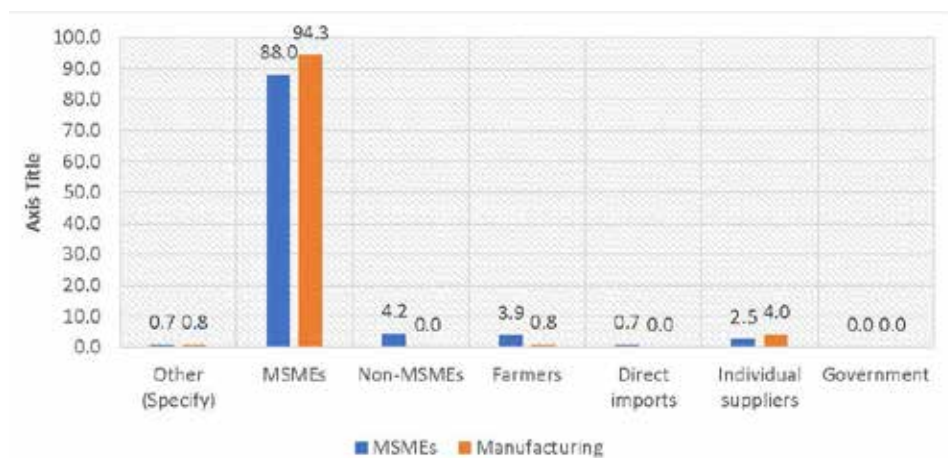
Source: KNBS, 2016.

**Source of material inputs**

Generally, manufacturing establishments and MSMEs source for material inputs from amongst MSMEs at 94.3 per cent and 88 per cent respectively (Figure 5.7). Individual

suppliers as well as non-MSMEs and farmers are also important to the supply of inputs. MSMEs also source minimal inputs from external markets (0.7 per cent), and therefore, disruptions in the external source markets may not have adverse implications to MSME operations in Kitui County.

**Figure 5.7: Source of material inputs**



Source: KNBS, 2016.

### Level of innovation by firms in Manufacturing

Manufacturing establishments in Kitui County were involved in both product, process and market innovations. All product innovations are seen under the micro category at 6.9 per cent, process (0.8 per cent) and market (3.5 per cent) (table 5.3).

**Table 5.3: Level of innovation by firms in Manufacturing**

Type of innovation	Micro			Total
	Don't know	No	Yes	
Product	0 (0)	2,631 (93.1)	195 (6.9)	2,826 (100)
Process	0 (0)	2,803 (99.2)	24 (0.8)	2,826 (100)
Market	0 (0)	2,726 (96.5)	100 (3.5)	2,826 (100)

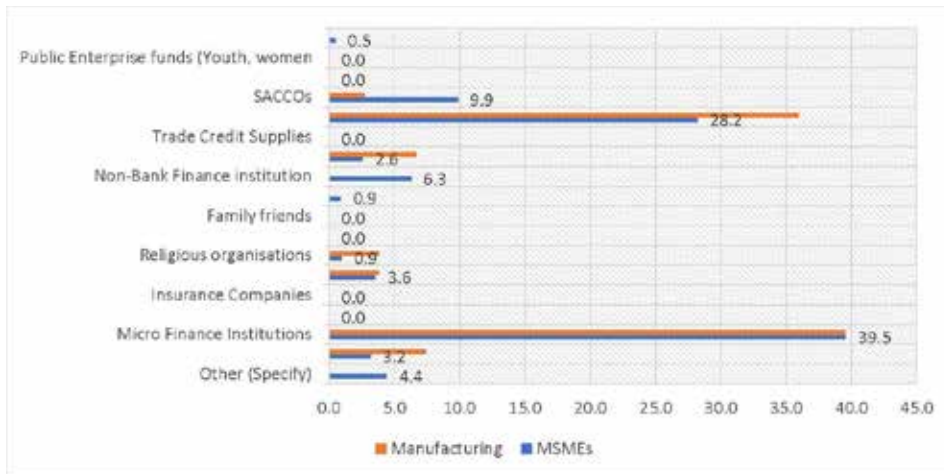
Source: KNBS (2016)

### Access to credit for Manufacturing and MSMEs firms

According to the MSME 2016 survey, 69.3 per cent of MSMEs and 68.7 per cent of those in manufacturing applied for credit. The main sources of credit for establishments in manufacturing are: microfinance institutions (39.5%), commercial banks (36%), public financing agencies and cooperatives (7.5%), rotating savings and credit associations (6.7%), religious organizations (3.8%), and self help groups (3.8%). MSMEs largely rely on microfinance institutions (39.5%), commercial banks (28.2%), SACCOs (9.9%), non-

bank finance institution (6.3%), self help groups (3.6%), public financing agencies and cooperatives (3.2%) among others (Figure 5.8).

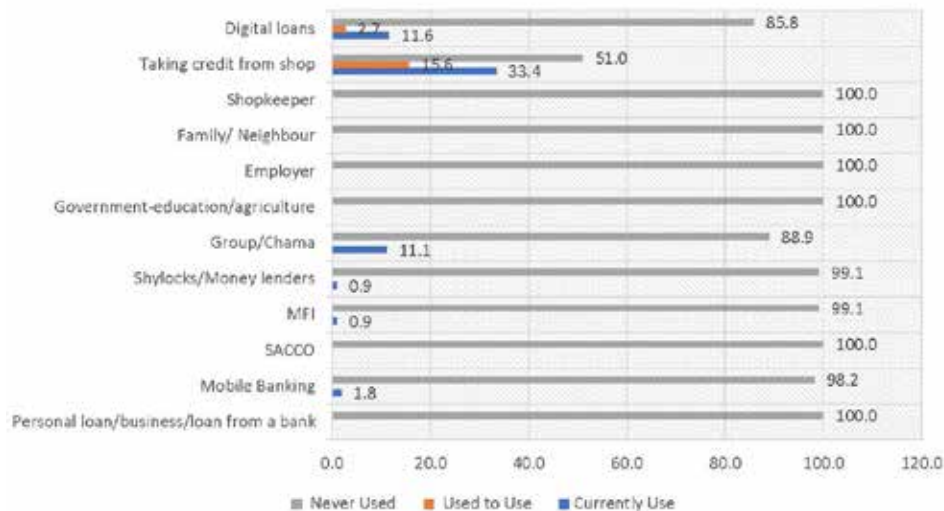
**Figure 5.8: Sources of finance**



Source: KNBS (2016)

Recent evidence from FinAccess 2019 provides further insights on sources of credit for businesses in Kitui County. Businesses commonly obtain credit from the conventional sources such as shops (33.4%), group/chama (11.1%), MFI (0.9%), and shylocks (0.9%). Emerging sources of credit for businesses in Kitui County include mobile money (1.8%) and digital loans (11.6%) (Figure 5.9).

**Figure 5.9: Recent sources of credit**

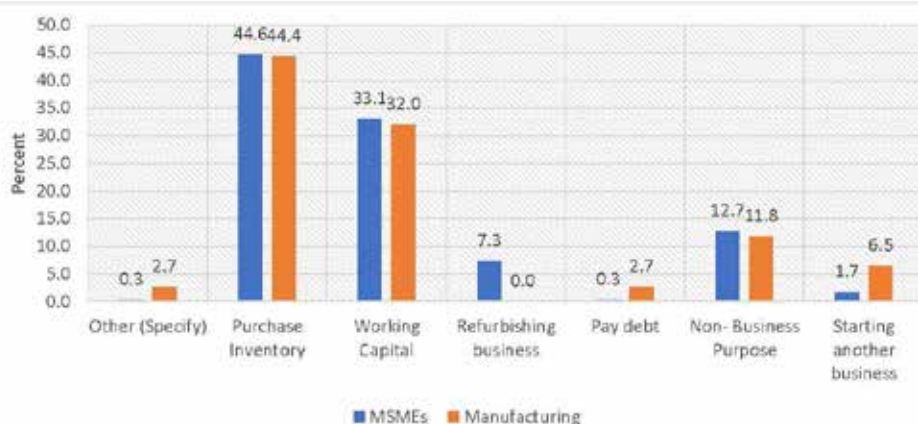


Source: FinAccess (2019)

**Purpose of credit**

Figure 5.10 presents the main purpose of credit by both MSMEs and firms in manufacturing. Broadly, manufacturing firms require credit for: purchase inventory (44.4%), working capital (32%), non-business purposes (11.8%), and starting another business (6.5%). MSMEs in Kitui County require credit for purchase inventory (44.6%), working capital (33.1%), non-business purpose (12.7%), and refurbishing business (7.3%).

**Figure 5.10: Main purpose of credit**



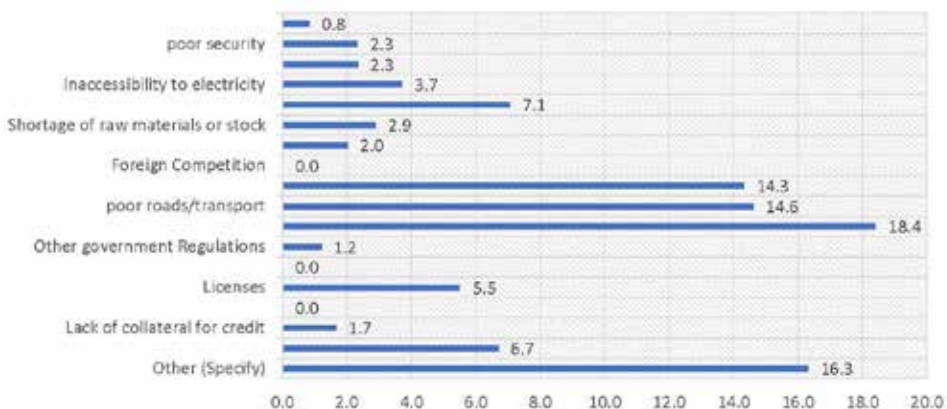
Source: KNBS, 2016

**Constraints faced by manufacturing firms**

Manufacturing firms face the following constraints as depicted in Figure 5.11: lack of markets (18.4%), poor roads/transport (14.6%), local competition (14.3%), power interruption (7.1%), licenses (5.5%), inaccessibility to electricity (3.7%), poor security (2.3%), and poor access to water supply (2.3%).



**Figure 5.11: Constraints faced by manufacturing firms**



Source: KNBS (2016)

**b) Micro Small and Medium Enterprises (MSMEs)**

Kitui County has 23,928 establishments<sup>5</sup> with 23,234 (97.1%) being micro; 616 (2.6%) are small; and 78 (0.3%) are large enterprises (KNBS, 2016) (Figure 5.12).

**Figure 5.12: Distribution of MSMEs by size**

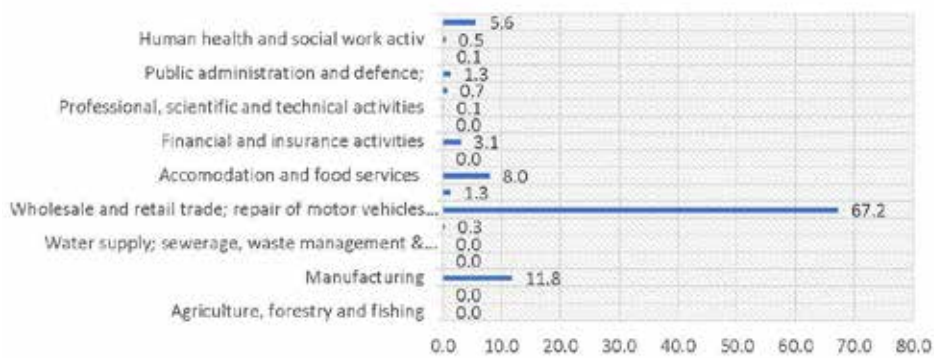


Source: KNBS (2016)

**Sector of operation by MSMEs**

Majority of MSMEs in Kitui County operate in the wholesale and retail trade; repair of motor vehicles and motorcycles (67.2%), manufacturing (11.8%), accommodation and food services (8%), arts, entertainment, and recreation (5.6%), and financial and insurance activities (3.1%) (Figure 5.13). Ideally, these are the sectors that have been affected most by the pandemic and need focus in achieving re-engineering and recovery.

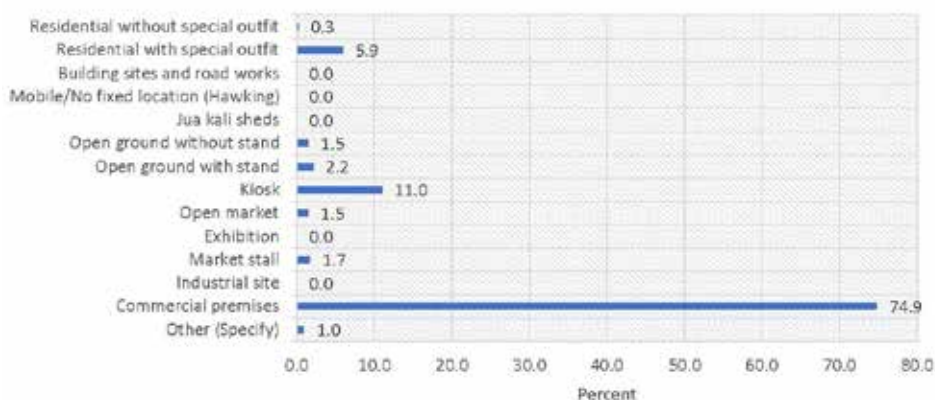
5 After applying weights

**Figure 5.13: Sector of operation by MSMEs**

Source: KNBS (2016)

#### **Location of the businesses by type of premises**

MSMEs in Kitui County are largely located in commercial premises (74.9%), kiosk (11%), residential with special outfit (5.9%), open ground with stand (2.2%), market stalls (1.7%), and open market (1.5%) (Figure 5.14). Majority of the businesses in Kitui County could be having difficulties in meeting their rental obligations due income disruptions occasioned by COVID-19. According to the May 2020 KNBS COVID-19 survey, all interviewed respondents from non-farm and farm businesses attributed non-payment of household rental obligations to reduced incomes/earnings.

**Figure 5.14: Location of businesses by premises**

Source: KNBS (2016)

#### **Distribution of MSMEs by gender and size**

Table 5.4 shows the distribution of MSMEs in Kitui County by gender: 44.6 per cent are female owned, 38.1 per cent are male owned, while 17.4 per cent are jointly owned (male/female). For Micro establishments, 45.4 per cent are female owned, 37.5 per cent are male owned, while 17 per cent are jointly owned. However, male owners dominate ownership

among small sized establishments at 64.4 per cent, females own 4 per cent, and 31.6 per cent are jointly owned. Considering large sized establishments, ownership is fully controlled by females (100%).

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

Gender	A11	Micro	Small	Large
Male	9,113 (38.1)	8,716 (37.5)	396 (64.4)	0 (0)
Female	10,661 (44.6)	16,558 (45.4)	25 (4)	78 (100)
Joint	4,154 (17.4)	3,960 (17)	195 (31.6)	0 (0)
Total	23,928 (100)	23,234 (100)	616 (100)	78 (100)

Source: KNBS (2016)

In terms of employment, the micro sized establishments employ more people (59.9%) compared to small (15%), and large (25.1%) (Table 5.5). Micro firms employ 28.6 per cent male and 31.4 per cent female and small sized employ 8.9 per cent male and 6.1 per cent female. Equally, more women are employed among the large establishments at 12.6 per cent while males include 12.5 per cent, respectively. Overall, more women (50.1%) are employed by MSMEs in Kitui County than men (49.9%).

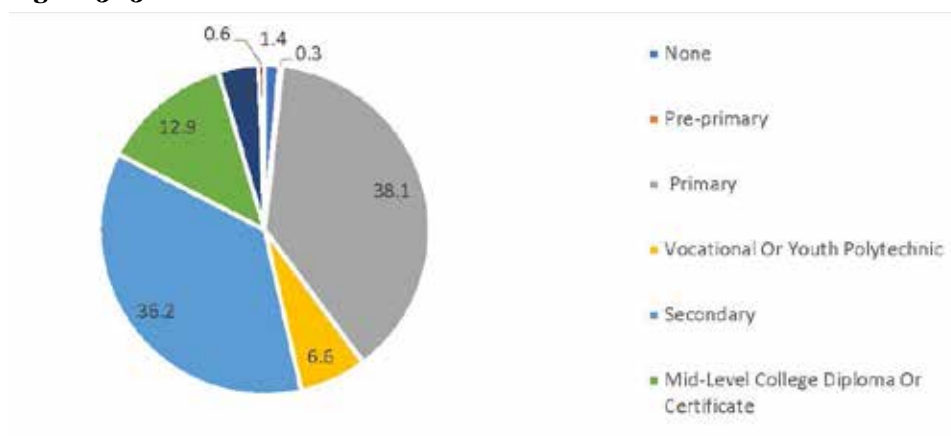
**Table 5.5: Employment by gender and size - N (%)**

Gender	Micro	Small	Large	Total
Male	18,623 (28.6)	5,775 (8.9)	8,138 (12.5)	32,536 (49.9)
Female	20,439 (31.4)	3,967 (6.1)	8,216 (12.6)	32,622 (50.1)
Total	39,062 (59.9)	9,742 (15)	16,354 (25.1)	65,158 (100)

Source: KNBS (2016)

### **Education levels of MSME owners**

Figure 5.15 indicates that majority of MSME owners in Kitui County have a primary education (38.1%) while 36.2 per cent have secondary and 12.9 per cent mid-level college diploma or certificate education respectively (Figure 5.15). In addition, 6.6 per cent have vocational or youth polytechnic, and 3.9 per cent have degree education.

**Figure 5.15: Education levels of MSME owners**

Source: KNBS (2016)

### Level of innovation by MSMEs

Table 5.6 presents the levels of innovation in Kitui County by MSMEs according to size. Generally, there were low levels of innovation across MSMEs with 8.5 per cent involved in product, 1.4 per cent for process, and 5.6 per cent in market innovation for micro-sized enterprises. Regarding small-sized enterprises, 0.6 per cent engaged in product and 0.6 per cent market innovation. With regards to large sized enterprises, none were involved in any form of innovation.

**Table 5.6: Level of innovation by MSMEs**

Type of Innovation	Micro				Small				Large			Total
	Refused to answer	Don't know	No	Yes	Refused to answer	Don't know	No	Yes	Don't know	No	Yes	
Product	0 (0)	0 (0)	21,177 (88.9)	2,022 (8.5)	0 (0)	0 (0)	464 (1.9)	151 (0.6)		78 (0.3)	0 (0)	23,815 (100)
Process	0 (0)	0 (0)	22,874 (96)	325 (1.4)	0 (0)	0 (0)	616 (2.6)	0 (0)	0 (0)	78 (0.3)	0 (0)	23,815 (100)
Market	0 (0)	0 (0)	21,873 (91.8)	1,326 (5.6)	0 (0)	0 (0)	472 (2)	144 (0.6)		78 (0.3)	0 (0)	23,815 (100)

### E-commerce

Participation in e-commerce by households in Kitui County is below the national average. About 1.7 per cent of the households participate in online e-commerce which is below a national average of 4.3 per cent (KPHC 2019). In comparison, men participate more in online e-commerce (2.1%) than women (1.4%). With introduction of stay-at-home protocols due to COVID-19 online trade has been expected to thrive, little may be impacted in Kitui County since fewer households participate in the same.

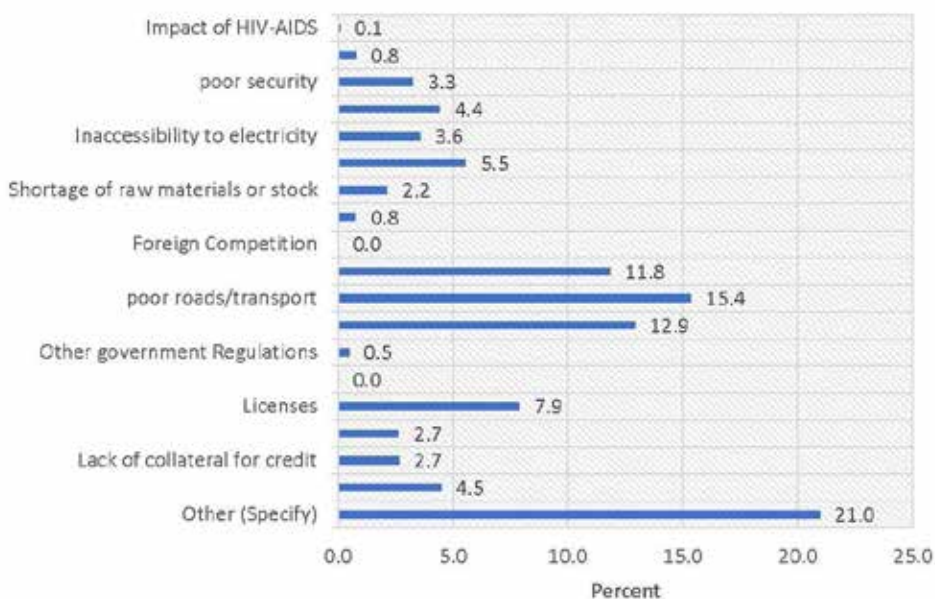
**Turnover tax**

Only 8.7 per cent of MSMEs in Kitui County (2,075) 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 the 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**

MSMEs in Kitui County face the following key constraints as shown in figure 5.16: poor roads/transport (15.4 per cent), lack of markets (12.9 per cent), local competition (11.8 per cent), licenses (7.9 per cent), power interruption (5.5 per cent), poor access to water supply (4.4 per cent), inaccessibility to electricity (3.6 per cent), and poor security (3.3 per cent).

**Figure 5.16: Main constraints faced by MSMEs**



Source: KNBS, 2016.

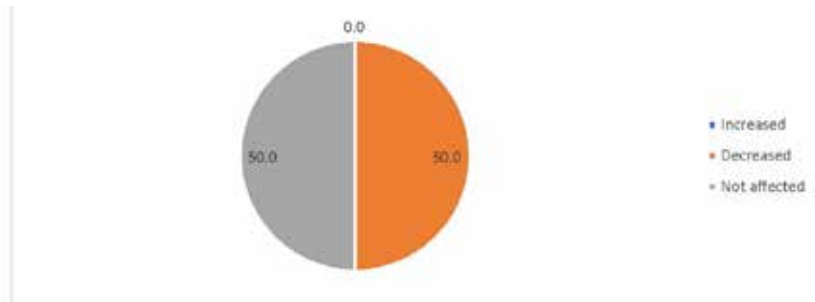
A study on County Business Environment for MSEs (CBEM) identified other constraints faced by MSMEs in Kitui County as: financial and technical capacity, market environment, and worksite and related infrastructure (KIPPRA 2019). On worksites, MSEs face inadequate and unequipped worksites, lack of public toilet facilities, lack designated areas for waste disposal, poor road infrastructure, 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 5.17 presents the effects of COVID-19 on household non-farm and farm businesses in Kitui 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.

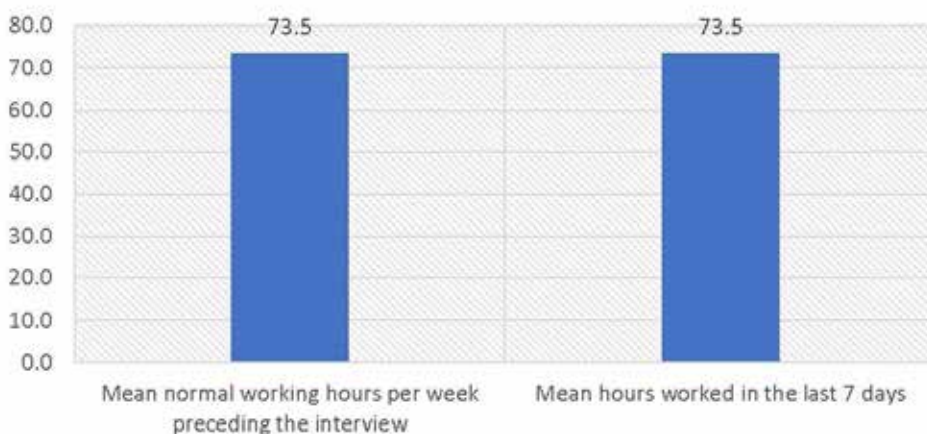
**Figure 5.17: Effects of COVID-19 on household non-farm and farm businesses**



Source: KNBS, COVID-19 Survey 2020 Labour dynamics

During the period considered in KNBS, COVID-19 Survey 2020, respondents did not report any improvement in the mean working hours for household non-farm and farm businesses in Kitui County which implies an improvement in economic activities between the interview periods (figure 5.18).

**Figure 5.18: Labour dynamics on household non-farm and farm businesses**



Source: KNBS, COVID-19 Survey 2020

The May 2020 KNBS COVID-19 survey also shows that the wholesale and retail trade sector lost 11.5 hours in usual and actual hours worked while accommodation and food services lost 6 hours in a week. This is an indicator of the adverse effects on the service sector of Kitui County due to the pandemic which implies loss of productivity, output and employment.

**Key Messages:**

- a) The key sectors that drive the economy of Kitui County include: Services, Agriculture and Manufacturing. Hence, support should be targeted to these sectors to ensure re-engineering of the County economy.
- b) key sub-sectors that drive manufacturing in Kitui County to include: wearing apparel, food products, furniture, fabricated metal products, except machinery and equipment, textiles.
- c) Majority of the sub-sectors in manufacturing in the County are male dominated including food products, fabricated metal products except machinery and equipment, among others. Females are mostly found in the wearing apparel, food products, and textiles.
- d) Manufacturing firms face the following constraints include: lack of markets, poor roads/transport, local competition, power interruption, licenses, inaccessibility to electricity, poor security, and poor access to water supply.
- e) Majority of MSMEs in Kitui County operate in the wholesale and retail trade, repair of motor vehicles and motorcycles; manufacturing; accommodation and food services; arts, entertainment and recreation; and financial and insurance activities. Generally, these are the sectors that have been affected most by the pandemic and need focus in achieving re-engineering and recovery.
- f) MSMEs in Kitui County face the following key constraints: poor roads/transport, lack of markets, local competition, licenses, power interruption, poor access to water supply, inaccessibility to electricity, and poor security.
- g) COVID-19 presented opportunities that could be harnessed like 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.
- h) Manufacturing establishments must also adopt to cope with the new guidelines which could include rearranging floor plans to allow for social distancing.
- i) Training and capacity building are important in assisting MSMEs to surmount the shocks faced during the pandemic but also allow for re-emergence.
- j) 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 Industrial Recovery and Growth**

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

- (i) Plans to have a leather production company to make shoes and bags that can compete with Bata. The County has already identified the place and procured the materials
- (ii) Plans to have a furniture making company. Already identified the place and procured materials.
- (iii) Plans to have a firm that produces juices e.g mangoes, tomato paste. So far the County has procured a vegetable drying machine.
- (iv) Kitui County is about to start a honey processing plant. To this end, the County has trained the beekeepers on how to increase production and offered them the requisite tools.
- (v) The County plans to have a Ndegu processing plant
- (vi) Plans to establish several interlocking plants that manufactures building blocks in various parts of the County.
- (vii) Opportunities to produce fresh crops along the riverbanks such as tomatoes, pilipili, onions and watermelons.
- (viii) Agro - processing for value addition with important areas of focus include honey production and processing, hides and skins processing; and crops such as green grams, cow peas, maize, tomatoes, bananas, watermelons, kales, spinach, pawpaw, onions and mangoes, tomatoes, maize, beans, and kales.
- (ix) The textile and wearing apparel sectors can be enhanced to provide PPEs for use within the County and potentially for the export market.
- (x) Exploration and processing of minerals such as limestone, iron ore, coal, graphite, gypsum, quartz, copper and granite.

### ***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) 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 incomes 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 Kitui County's planned activities due to reduced projected revenues.
- (ii) The need to identify and promote specific and emerging value chains as a result of COVID-19, and which Kitui County has comparative advantage.
- (iii) Review all the ongoing interventions by the County and also 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 following should be prioritized:

- (i) Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short term. 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 to 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), sanitisers, 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 to adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing.
- (iv) Carry out productivity improvement programmes in manufacturing enterprises in the County.
- (v) Develop and promote value chains in livestock (abattoirs), honey, mangoes, poultry, leather, garment making, Ndengu production.
- (vi) Fast-track establishment of industries in the County to process hides and skins into leather and its products.
- (vii) Prioritize and support value addition in agriculture and livestock industries.
- (viii) Establish cottage industries for briquette production, wood-fuel production, fabrication of energy saving Jikos, and moulding of clay liners.

## 6 Infrastructure

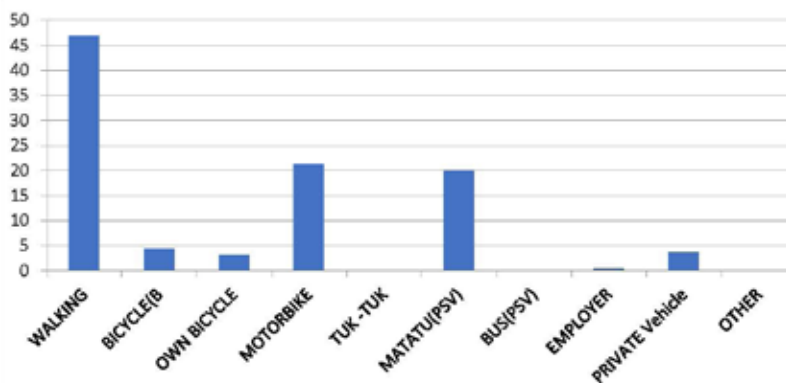
### 6.1 Transport and Roads

Public Service Vehicles have been well disciplined in observing the social distancing measures as they are managed and operated by the SACCOs. Reduced number of passengers has increased the cost of transport. The county has exempted parking fees for PSVs. It has been difficult to enforce social distancing among Bodaboda riders.

#### *Characteristics of the sector*

Majority of households own a bicycle (22.0%) and a motorcycle (13.2 per cent). Car ownership is at 3.7 per cent (KNBS, 2019). The main means of transport used in the County is walking at 46.9 per cent, followed by motorbike 21.3 per cent, PSV matatus at 19.91 per cent, bicycle (bodaboda) 4.38 per cent and private car at 3.8 per cent, figure 6.1, while 85.54 per cent of the population had not changed the main means of transport (KNBS, 2020b). On average, residents travel 2.53 kilometers to their workplace at an average cost of Ksh 60.92. For the commute to school, residents spend on average Ksh 474.29 (KIHBS, 2015/16).

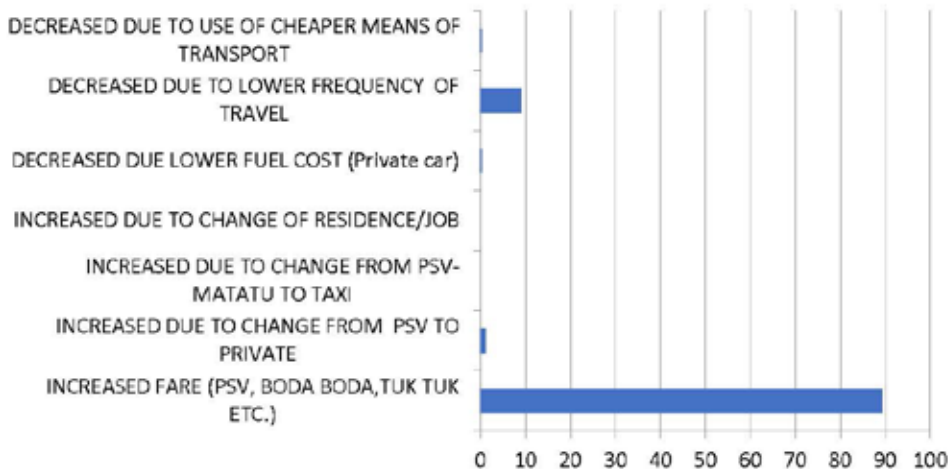
**Figure 6.1: Main means of transport**



*Source: KNBS COVID-19 Impact Survey 2020*

The KNBS COVID-19 Impact Survey 2020 revealed that 64.62 per cent of the population reported a change in the cost of travel/commute, Figure 6.2. The expenditure on transport increased by 70.41 per cent from Ksh 98 before February 2020 to Ksh 167 in May 2020 for a one-way trip. The main change (89.31%) in transport cost was attributed to increased fares for PSV, BodaBoda and TukTuk.

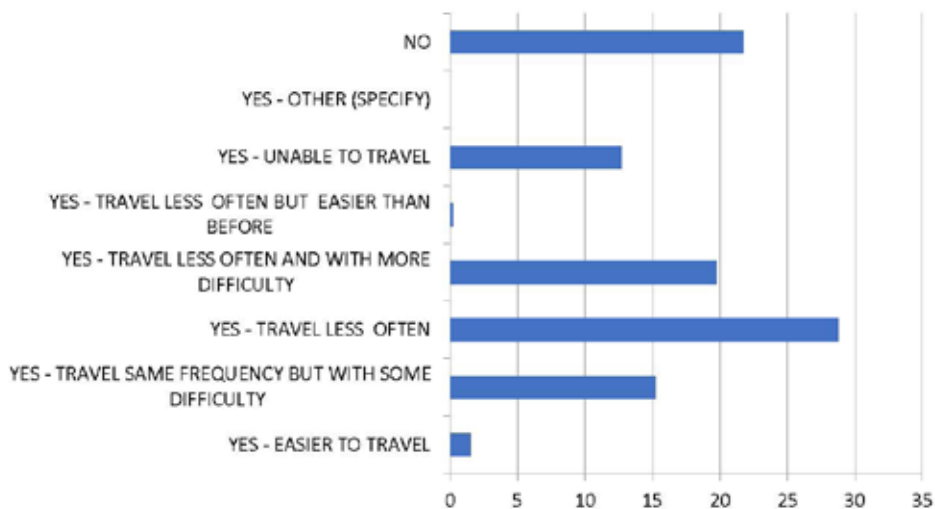
**Figure 6.2: Change in cost of main means of transport**



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

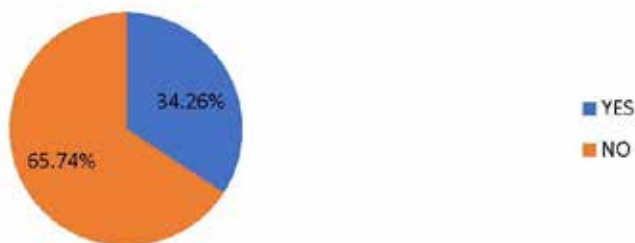
Residents had changed their travel patterns with 28.8 per cent of the population traveling less often, while 15.2 per cent travelled with the same frequency but with some difficulty, and 12.7 per cent were unable to travel. However, 21.7 per cent of the population did not change their travel pattern, 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 34.3 per cent of households.

**Figure 6.4: Proportion of residents whose service delivery has been affected**

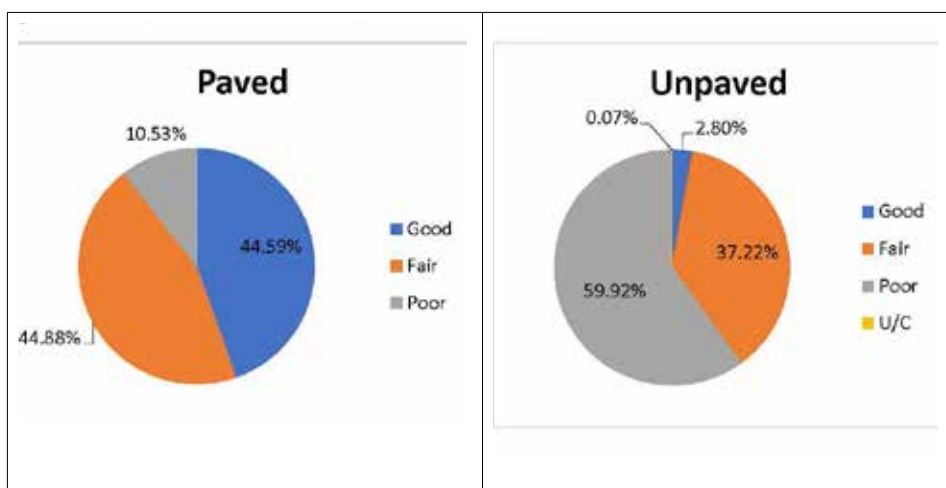
Source: KNBS COVID-19 Impact Survey 2020-wave 2

### Potential for revenue collection

The County was allocated a total of Ksh 309,636,150 from the Road Maintenance Levy Fund towards road maintenance in the Financial 2017/18 (OCOB, 2019).

### Road Network in Kitui County

The county has a total of 13,314.02 kilometres of classified road network. The paved County Road network covers 5.78 km, while the paved National roads cover 256.86 km. Out of the total paved road network of 262.64 km, 44.59 per cent is in good condition, 44.88 per cent in fair condition and 10.53 per cent in poor condition. The unpaved road network in the county covers 7116.36 km (county roads) and 1490.33 km (National roads), of this, 2.8 per cent is in good condition, 37.22 per cent fair and 59.92 per cent in poor condition as depicted in figure 6.5 (KRB, 2019).

**Figure 6.5: Road Condition Mix-Classified Road Network**

Source: KNBS COVID-19 Impact Survey, 2020

The unclassified road network in the County covers 4444.8KMs, with 4081.5KMs of narrow roads, that is, road with a reserve of between 4 -9 meters, while there is a total of 363.3KMS 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<sup>6</sup>. The county has a RAI of 56 per cent which is below the National Average of 70 per cent, indicating that access to transport in rural areas is below average (KRB,2019). This has negative implications with regard to sectors that rely on accessibility such as agriculture, trade and overall development. The road condition mix of the unpaved network at 59.9 per cent is a constraint to development.

### ***Opportunities with COVID-19 in Transport sector***

With reference to the 8 point stimulus programme by the National Government<sup>7</sup> and resources allocated to road development and maintenance, the County has the opportunity to strategically improve the road network for economic development, while creating jobs for youth, women and vulnerable groups as espoused in the Roads 2000 programme<sup>8</sup> 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<sup>9</sup> offers a strategic and cost-effective approach to improve rural accessibility in the County.

Residents predominantly rely on walking, motorbike and matatu PSV transport, 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<sup>10</sup>.

### **Emerging Issues**

- Poor road conditions for unpaved network
- Low RAI indicative of poor accessibility for rural communities
- Reliance on PSV transport requires enforcement of COVID-19 mitigation measures
- Public Service Vehicles have been well disciplined in observing the social distancing measures as they are managed and operated by the SACCOs. Reduced number of passengers has increased the cost of transport. The county has exempted parking fees for PSVs. It has been difficult to enforce social distancing among Bodaboda riders.

### **Recommendations**

6 RAI defined : <https://datacatalog.worldbank.org/dataset/rural-access-index-rai>

7 GoK eight 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/>

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

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

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

- 
- i) Identify a core rural road network for prioritization to improve the rural access index (RAI) from the current 56.0 per cent with a target to match the national average of 70.0 per cent.
  - 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<sup>11</sup>.
  - iii) Identify county significant infrastructure projects for implementation under a stimulus package to support economic recovery from the effects of the pandemic.
  - iv) 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<sup>12</sup>.
  - v) Sensitize PSV and boda boda operators on COVID-19 prevention measures and assist vehicle owners in retrofitting vehicle designs for social distance, hygiene and ventilation.
  - vi) Re-develop bus parks and termini to address crowding and social distancing concerns stipulated in the public health guidelines.
  - vii) Focus on increasing the share of unpaved roads in good and fair condition to above 62 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.
  - viii) 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

ICT use has increased especially in this era of virtual meetings. The county administration has embraced digitalization of payments through mobile payments. However, the internet connectivity is poor which is major challenge to use of ICT.

### Characteristics of the sector

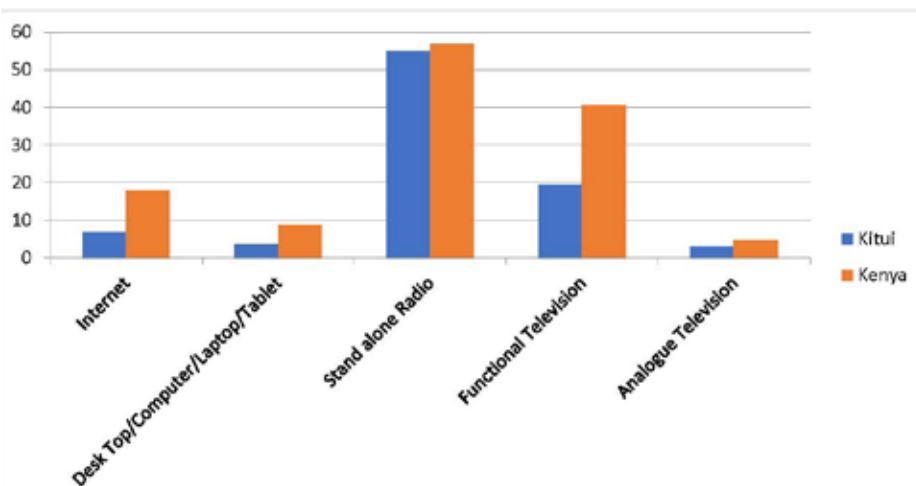
The analysis of the 2019 KPHC reveals that only 6.8 per cent of the conventional households in the county 'own' internet with 3.5 per cent owning a desktop, computer laptop or tablet. Internet access, ICT device ownership and TV ownership is particularly critical not only for access of COVID-19 information, but as well as supporting remote learning by the pupils as well as remote working, figure 6.6.

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<sup>11</sup> Sustainable Mobility for All: <https://sum4all.org/implementing-sdgs>

<sup>12</sup> Roads 2000 programme

**Figure 6.6: Per centage Distribution of Conventional Households by Ownership of ICT Assets**

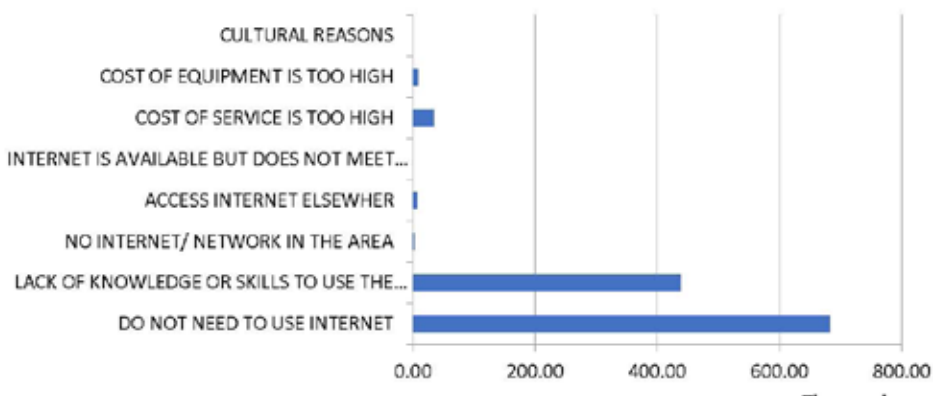


Source: KIHBS 2015/16; KNBS (2019), Population and Housing Census

Online shopping is not prevalent in the County. 1.7 per cent of the conventional households searched and bought goods/services online. There exists gender disparity in online shopping with more men (2.1 per cent) than women (1.4 per cent) undertaking online shopping.

The perception of 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 don't have internet connection (KIHBS). Other key factors include the lack of internet/network in the area, and the high cost of service and equipment (Figure 6.7).

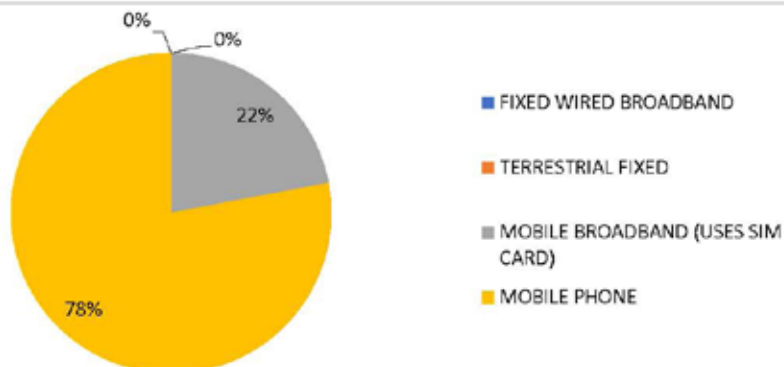
**Figure 6.7: Reasons for Lack of Internet Connection**



Source: KNBS, 2016-KIHBS 2015/16

Approximately 78 per cent of the internet users in the county rely on mobile phone for connectivity, with a marginal population of 22 per cent relying on mobile broad band that uses a sim card for connectivity, Figure 6.8.

**Figure 6.8: Type of Internet connection**

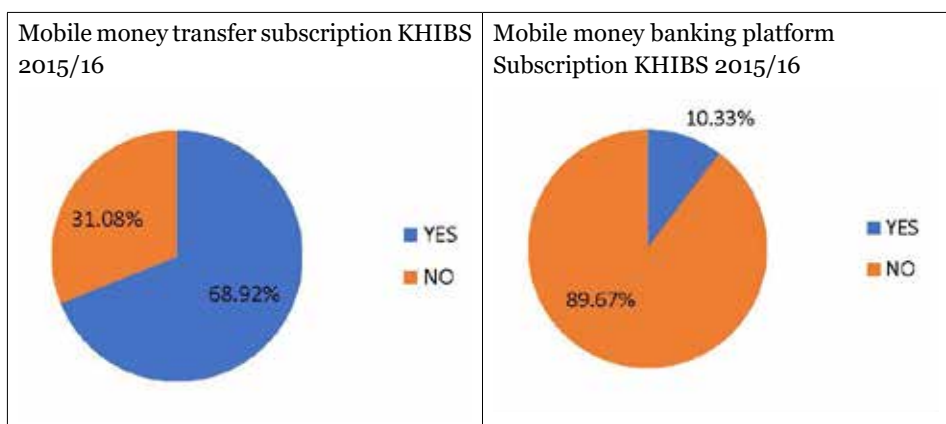


Source: KNBS, 2016-KIHBS 2015/16

Approximately 42.9 per cent of the population aged 3 years and above own a mobile phone which is lower than the national average of 47.3 per cent.

Approximately 68.92 per cent of the people in the county have a mobile money subscription compared with only 10.33 per cent that have a mobile money banking platform subscription (KHIBS 2015/16), figure 6.9.

**Figure 6.9: Mobile money transfers subscription and mobile money banking platform**



Source: KNBS, 2016-KIHBS 2015/16

The county experience gender divide in use of internet and ICT devices as well as mobile money subscriptions. Both internet and ICT device use is higher among the male with 15.1 per cent of the men and 12.1 per cent of the women using internet, while 5.6 per cent of the men and 4.2 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.



### **Constraints faced**

- Low household ownership of internet and ICT devices limiting potential use of ICT for livelihood support.
- Households perceive that they do not need to use the internet,
- Households lack knowledge and skills on internet
- The county experiences challenge due to network problem.

### **Opportunities for COVID-19 in ICT**

Working with the national government to connect the county to the fiber network under the NFOBI programme.

### **Recommendations**

- i) 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 42.9 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony<sup>13</sup>
- ii) Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund<sup>14</sup> as a “last resort” in providing ICT access in remote areas where market forces fail to expand access.
- iii) Promote technology transfer and diffusion by collaborating with IT personnel in universities to support the development of ICT competence and skills among the public and bolster a digital economy.
- iv) Harness the power of technology and use innovative solutions to bridge the gender digital divide.
- v) Enhance internet connectivity to public buildings and key trade centers 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.
- vi) Make ICT a standalone sector for planning and budget allocation. This is aimed at giving strategic prominence to planning, budgeting and investment in ICT.
- vii) Review and implement ICT policies and procedures to manage ICT and mitigate cyber threats. Collaborate with the national Computer Incident Response Team (CIRT) and the Communications Authority (CA) towards managing cyber threats, disasters and pandemics. This is because enhanced use of ICT is known to raise threats and risks related to cyber-crime and misinformation.

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

14 Universal Service Fund: <https://ca.go.ke/industry/universal-access/purpose-of-the-fund/>

## 7. Housing and Urban Development

Kitui County is initiating an affordable housing program that will see the building of 2,000 units. Majority of households are headed by men (57.6%) compared to women (42.3%) in the County (KIHBS, 2015/16). There are three urban centers in the County with a total population of 48.2 per cent males and 51.8 per cent females, Table 7.1. The urban land area covers 24 square kilometers with a population density of 2292 persons per sq.km

**Figure 7.1: Distribution of population by urban centers by gender**

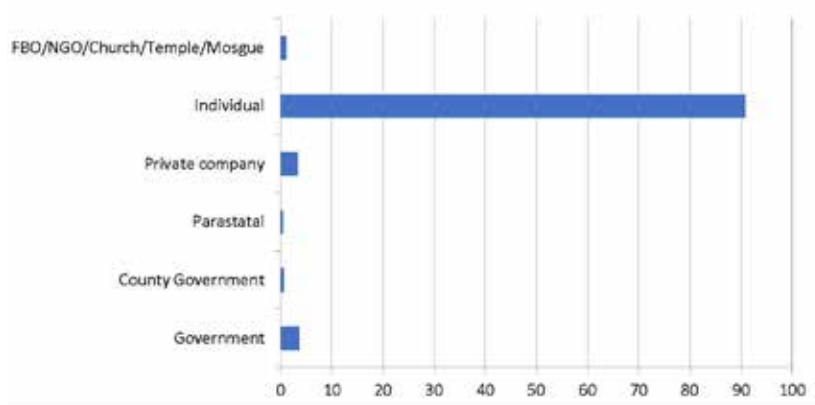
URBAN CENTRE	TOTAL	MALE	FEMALE
KITUI	29,062	14,223	14,838
MWINGI	17,025	8,140	8,885
KABATI	2,420	1,087	1,333

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

### 7.1 Characteristics of the sector

The housing tenure is predominantly owner occupied at 85.8 per cent, with 14.2 per cent of the households under rental tenure. Individuals are the primary providers of rental housing at 90.9 per cent, followed by National Government (3.6%); and Private Companies (3.3%), Figure 7.2. For those who own homes, 97.4 per cent constructed the houses while 1.0 per cent purchased the house and 1.6 per cent inherited their homes (KNBS, 2019).

**Figure 7.2: Distribution of households renting/ provided with the main dwelling unit by provider**



Source: Kenya Population and Housing Census, 2019

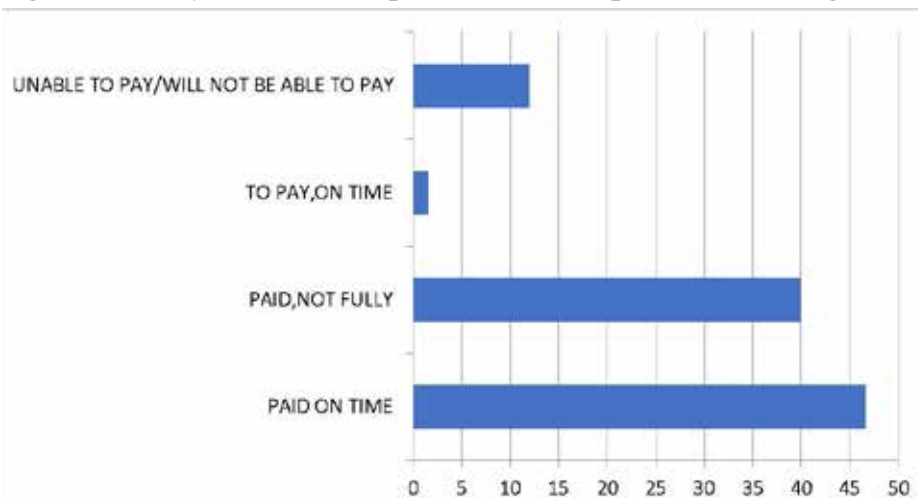
### Housing Quality

On average, the main dwellings of houses in the County have 2.13 habitable rooms against an average household size of 4.2 persons in a household, translating to approximately 1.99 people per room. According to the UN-Habitat, overcrowding occurs when there are more than three people per room<sup>15</sup>. In terms of housing quality (building material), 57 per cent of houses are constructed using finished materials for walls, floor and roofing compared to 43 per cent constructed using rudimentary materials (KIHBS, 2015/16). Majority of households (93.1 per cent) have iron sheets for roofing, Bricks walls (46.4 per cent) and Earth/Sand floors (52.1 per cent) (KNBS, 2019).

### Rent Payment

On average, rental households spend approximately Ksh 4233 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 21.47 per cent which is within the acceptable threshold of 30 per cent (KNBS, 2012/13).

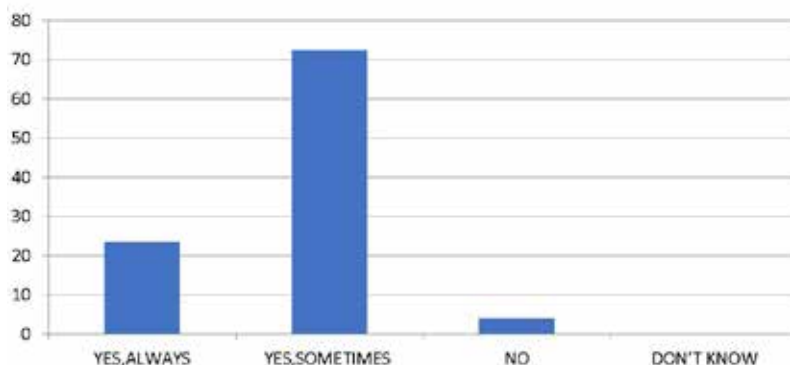
**Figure 7.3: Has your household paid the rent for April 2020 on the agreed date**



Source: KNBS COVID-19 Impact Survey 2020 wave 2

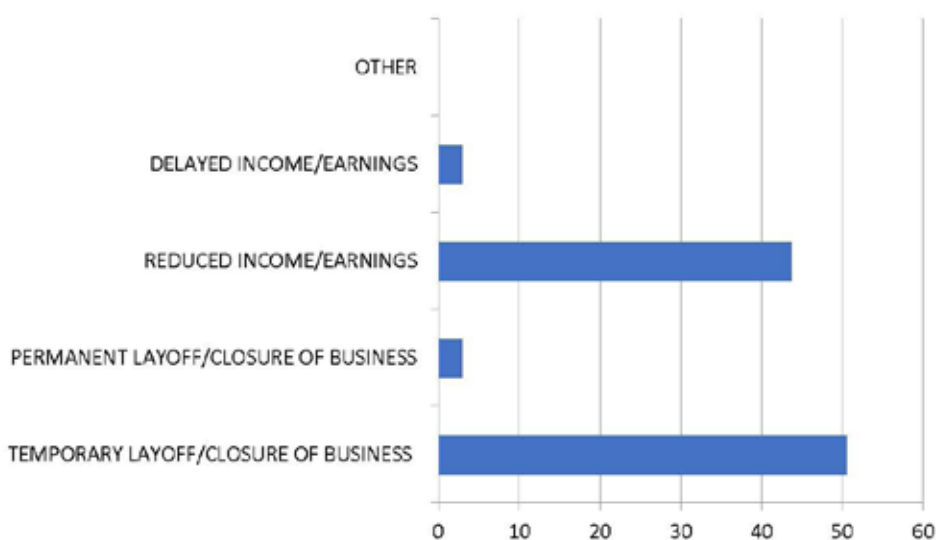
With the advent of COVID-19 pandemic, households’ ability to pay rent has been affected, with 12.0 per cent of the population indicating inability to pay rent on the -agreed date for April 2020, Figure 7.3, compared to 46.61 per cent of the population that were able to pay rent on the agreed date and 35.2 per cent who paid rent on agreed date before COVID-19 pandemic, Figure 7.4.

15 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=Crowd](https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/#:~:text=Overcrowding%20occurs%20if%20there%20are,per%20habitable%20room%20(88).&text=Crowd)

**Figure 7.4: Proportion of residents paying rent per terms of contract**

Source: KNBS COVID-19 Impact Survey 2020 wave 2

The main reason that has made households unable to pay rent was attributed to Temporary layoff/closure of business, reported by 50.5 per cent of the population. The inability to pay rent was attributed to the COVID-19 pandemic by 100 per cent of the population, figure 7.5.

**Figure 7.5: Reasons for not being able to pay rent**

Source: KNBS COVID-19 Impact Survey 2020 wave 2

Majority of the households (92.5%) did not receive a waiver or relief on payment of rent from the landlord, with 3 per cent reporting a partial waiver and 1.5 per cent reporting a full waiver. To overcome the effects of Corona virus on payment on rent 7.5 per cent of households renegotiated rent terms, while 7.5 per cent of households did not take any measures. Approximately 15.55 per cent used personal savings to pay rent, Figure 7.6.

**Figure 7.6: Measures taken by household to mitigate COVID-19 effects on rent**



Source: KNBS COVID-19 Impact Survey, 2020

With regard to primary energy source for cooking, 92.6 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.

### **Constraints faced**

- Household inability to pay rent due to livelihood shocks
- Existing stock of housing units built using rudimentary materials

## **7.2 Opportunities with COVID-19 in Urban Development**

- Existing stock of owner-occupied homes that can be improved using finished building materials for roofing, walls and floors.
- Partnership with the National Government and Private Sector in development of affordable housing.

## **7.3 Emerging Issues**

- There are households that occupy dwellings constructed using rudimentary materials.
- The county is initiating an affordable housing program that will see the building of 2,000 units

## **7.4 Recommendations**

- i) Integrating and implementing disaster risk reduction and management in County Spatial Plans and urban area plans to reduce vulnerability and build resilience and responsiveness to natural and human-made hazards.

- ii) Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System. To be used in pandemic and disaster surveillance and emergency response.
- iii) Develop a policy to promote home ownership to address the problem of rent distress during times of emergency.
- iv) Improve capacity for urban planning and design and the provision of training for urban planners at all sub-county offices.
- v) Identify and designate urban centers for upgrade pursuant to provisions of the Urban Areas and Cities (amendment) Act, 2019.
- vi) 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 mitigative measure to future pandemics and disasters.
- vii) Formulate and seek approval of urban development plans and development control policies to support investment and development of urban areas.
- viii) Adopt programmes aimed at an increasing household access to clean energy sources and technologies for cooking to mitigate against exposure to respiratory diseases.

### 8.1 Characteristic of the Sector

The County's tourist attractions are categorized as National parks, game reserves and other tourist attraction centres. Wildlife is found in the Tsavo east national park, South Kitui game reserve, Mwingi game reserve, which is visited by both domestic tourists (62.1%) and foreign tourists (37.9%). In 2016/17, the county received 665 visitors comprising of 385 domestic and 280 foreign tourists. Other attractions are physical attractions (e.g., the Nzambani rocks); cultural and heritage tourism; ecotourism and conservation; excursions: nature walks; mountain climbing; picnic sites<sup>16</sup>.

Kitui County lacks star-rated accommodation facilities. However, there are over a dozen registered facilities, mainly guest houses and medium size hotels located across the county. The county also has potential for enhancing tourism in the following areas which remains under-exploited; Sport tourism, Ecotourism, M.I.C.E, Cultural tourism.

In the first CIDP period, 2013-2017, the accommodation and food services sub-sector accounts for only 0.21 per cent of the GCP. This implies the sector had not been prioritized. In the second CIDP period, the county allocated 6.92 per cent of the proposed total budget of Ksh 140,547.75 million to development of the Tourism, Sports and Culture sector. This will enhance contribution of tourism to the economy of Kitui County. Specifically, the county requires a tourism development master plan to allocate development resources and timelines effectively. There is need to allocate more resources to its development, especially MICE facilities and other niche products.

### 8.2 Opportunities with COVID-19 in 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;

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16 Kitui CIDP 2018-2022

## **8.4 Recommendations**

The strategies for re-engineering the county's tourism sector include:

- i) Map all potential tourism sites in the County and developing a Kitui County tourism development masterplan.
- ii) Tourism niche product development; Creating birdwatching tourism product; developing Nzambani rock ecotourism centre; developing viewpoints.
- iii) Developing and implementing a tourism promotion and marketing strategy; Promoting sports tourism products to empower the youth; promoting wildlife tourism; Promote cultural festivals; and domestic tourism.
- iv) Improving on the tourism circuit connecting coast and Kitui County.
- v) Upgrading sports facilities to promote talent; setting up a sports council; leveling playgrounds in primary and secondary schools.
- vi) Rehabilitate the south Kitui National Reserve, promoting wildlife tourism circuit.
- vii) Developing relevant policies to preserve Kamba culture and heritage; pre-historic sites; construction of cultural centres.
- viii) Improve infrastructure to physical tourist attractions to enhance accessibility.
- ix) Provide incentives for: construction of recreation facilities and promote the destination to increase its popularity and visits; construction of star-rated hotels and modern M.I.C.E facilities; building 3 conference facilities at Kitui, Mwingi and Mutomo towns.
- x) Improve WASH in all tourist sites, hotels and other facilities to curb spread of COVID-19 and other pandemics.
- xi) Enforce the sand harvesting Act.



**9.1 Characteristics of the Sector**

***General health provision in the County***

In 2019/2020, the number of health facilities in the county were 414 which comprised of 394 primary health facilities and 20 hospitals. This was an improvement from a total of 313 health facilities in the previous year, 2018. The number of beds per 10,000 population is 23 against the WHO recommendation of 30 beds per 10, 000 population.

**Table 9.1: Health provision**

<b>Year</b>	<b>2018</b>	<b>2019/20</b>
<b>Health facility density</b>		
Primary health facilities	300	394
Hospitals	13	20
<i>Number of health facilities</i>	<b>313</b>	<b>414</b>
Health facility density	5.3	6.0
<b>Bed density</b>		
Hospital beds	1,553	1,573
No. of Beds per 10,000 population	24	23
<b>Human resource density</b>		
Total workforce	1,492	2,017
Labour participation for Health (Technical)	1,229	1,765
Number per 10,000 population	12.3	15.1

*Source: MOH (2021)*

The health facilities and personnel serve a growing population of 1,136,187 people according 2019 census. In 2019, total health workforce was approximately 2,017 representing 15.1 health workers per 10,000 population which is below 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	16.2
Government health centre	28.4
Government dispensary	39.0
Faith Based (church, Mission) Hospital / Clinic	5.6
Community Health	0.0
Private hospital / clinic	12.1
Nursing/ Maternity Home	0.0
Pharmacy/ chemist	0.0
Community health worker	0.0
Shop/ Kiosk	2.3
Traditional healer	0.0
Faith healer	0.0
Herbalist	0.0
Other	0.0
Number of Individuals ('000)	194

Source: 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 Kitui County residents who reported illness visited government dispensaries at 39 per cent followed by those who visited government health centres at 28.4 per cent and Government hospital at 16.2 per cent. About 12.1 per cent of county residents who reported illness also visited private hospitals and 5.6 per cent 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, 8.6 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 86.1 per cent of the population. Employer contributory insurance cover was reported by 8 per cent of the population. Private contributions to insurance cover were reported by 1.5 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)	1,098
Share of population with health insurance (%)	8.6
NHIF	86.1
Private-Contributory	1.5
Private-Non-Contributory	5.9
Employer-Contributory	8.0
Employer-Non-Contributory	1.3
Other	0.0
Number of Individuals ('000)	94

Source: KIHBS 2015/16

### ***Place of delivery***

In the 2015/16 KIHBS, women in Kitui 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 37.6 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 42.3 per cent, 12.4 per cent, and 5.2 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	42.3
Health Centre	12.4
Clinic/ Dispensary	5.2
Maternity Home	1.7
At Home	37.6
Other	0.8
Not stated	0.0
<b>Number of Individuals ('000)</b>	134

Source: 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 47.6 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 15.8 per cent were fully immunized against measles at 18 months.

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

		<b>Proportion of Children</b>
Vaccination Card	Yes Seen	63.4
	Yes, Not Seen	34.7
	No	1.9
	Not stated	0.0
Measles Vaccination	Measles I (At 9 months Card)	47.6
	Measles II (At 18 months Card)	15.8
	Measles II (Mother/ Guardian memory)	24.3
	Either (card or memory)	71.9
<b>Number of Individuals ('000)</b>		134

Source: KIHBS 2015/16

### **Health outputs**

The County has prioritized public health management through enhancement of latrine coverage, solid and liquid waste management. The County Government had also schemed on enhancing supply of drugs; investing in preventive care through regular tests and screening exercises; providing improved sanitation and environment health services; establishing a universal health insurance scheme; improving health infrastructure and equipment.

The five main common diseases in the County are malaria 49 per cent, diarrhea 3.4 per cent, stomachache 5 per cent, Flu 4.1 per cent and Upper respiratory tract infection 7.7 per cent. The main causes of morbidity for children under 5 years in the County are: URTI, diarrhea, skin diseases, intestinal worms, confirmed malaria, and pneumonia. Patients over 5 years of age die due to URTI, skin diseases, confirmed malaria, diarrhea, URTI, rheumatism and hypertension. Additionally, HIV/AIDS is also a prevalent disease especially in the urban centers with a prevalence rate of 6.1 per cent. The main Non-Communicable Diseases (NCDs) include cancer, diabetes, hypertension, benign prostrate hypertrophy (BPH) and arthritis.

The nutrition status of the population in the Kitui County remains poor because of frequent droughts resulting to food insecurity at the household level, sub-optimal infant and young child feeding practices, poor childcare practices, inadequate access to health services and poor hygiene and sanitation practices in the communities. Wasting rates among children

less than five years are at 3.4 per cent. Stunting is currently at 45.8 per cent (Kitui Nutrition Survey Sept 2013) which is way above the national average of 26 per cent. Prevalence of underweight is 19.7 per cent as compared to the national average of 16 per cent.

The Infant and Young Child Nutrition (IYCN) practices are suboptimal across the County. Exclusive Breast Feeding (EBF) for six months stands at 45 per cent (Kitui Nutrition Survey) while eHealth 85.4 per cent had initiated breastfeeding within the first hour after delivery. Only 76.9 per cent of the caregivers fed their children more than three times in a day an indication of inadequate complementary feeding. The household dietary diversity score (HDDS) was 4.7 per cent, with 95.2 per cent of households accessing food by purchasing (Kitui Nutrition Survey, 2012); which implies that many households have limited options of livelihoods in the wake of low household incomes and high prices of staple food.

The immunization for Kitui County is generally low at 57 per cent compared to the National status 83.5 per cent. The trend has worsened from 75 per cent in 2012 and as such, the Ministry of Health and Sanitation is focusing on the health of children under one. To reverse the trend and improve immunization coverage to 80 per cent, there has to be an increase in outreach services and an increase in the number of immunizing centers available, as well as ensuring adequate vaccine supply. In addition, there is an increase in prevalence rates of cervical cancer cases. Currently, Kitui County has had the pilot vaccination of the HPV vaccine.

Kenya status decline in maternal mortality rate from 488/100,000 to 362/100,000 by 2018. The proportion of mothers delivering under the care of skilled health workers is only at 46.2 per cent, just above the national average of 42 per cent. Infant Mortality was 47/1000 live births is high compared to the National to 39 per 1,000 live births and WHO status 41 in 2016. Neonatal Mortality stood at 29/1000 live births and under-5 mortality was 57/1000 live births (KDHS, 2014).

HIV adult prevalence stood at 4.5 per cent in 2016, with 2286 children with the virus. The ART coverage for adults stands at 65 per cent and ART coverage for children is 88 per cent. The low acceptability of contraceptives can be attributed to the prevailing culture, traditions, and lack of awareness within the community, which promotes negative attitudes towards the uptake of contraceptives.

**Table 9.6: Health indicators in Kitui county**

Key Health Indicators	County Estimates
<b>Maternal and Child Services</b>	
<i>Skilled delivery (%)</i>	46.2
<i>Children born at home</i>	52.1
<i>Fully immunized child</i>	56.8
<b>Child Mortality</b>	
<i>Infant mortality (* /1000)</i>	47
<i>Under-5 mortality (* /1000)</i>	57
<i>Neo-natal mortality (* /1000)</i>	29
<b>Nutrition Status</b>	

<i>Stunted children (%)</i>	45.8
<i>Wasted children (%)</i>	3.4
<i>Underweight children (%)</i>	19.7
<b>HIV (%)</b>	
<i>HIV adult prevalence (%)</i>	4.5
<i>Children with HIV(No.)</i>	2286
<i>ART adult coverage (%)</i>	65
<i>ART children coverage (%)</i>	88

Source: KDHS (2014), DHIS (2018)

### **Effects of COVID-19**

The county has two main isolation centres Kauwi Sub-County Hospital with 25 isolation beds and Mwingi Level 4 Hospital with eight isolation beds. However, a health facility distribution analysis conducted by the former Commission for Implementation of the Constitution (CIC) showed that the 230 health facilities were unevenly and inequitably distributed in the County. In three Sub-Counties, Kitui Central, Kitui West and Mwingi West, over 95 per cent of the residents live within an average distance of 5 kilometers from their homes to the nearest health facility.

Kitui County has several hospitals and health centers to meet the health needs of residents, among them Kitui County Referral Hospital, Mwingi Sub-County General Hospital, Kitui Nursing Home, Neema Hospital, Jordan Hospital, mission-run hospitals such as Muthale Mission hospital and some private health centers. Kitui County has commissioned 23 new health facilities to reduce the distance, time and cost to accessing healthcare services.

Similarly, due to terrain and condition of the roads, it takes people in these three Sub-Counties less than 30 minutes to reach health facilities in their areas as recommended by World Health Organization (WHO). In some areas of the under-served Sub-Counties, people travel distances of between 15-25 kilometers to access existing health facilities. The County has initiated a process leading to the construction, opening and operationalization of 23 new health facilities to bridge the distance gap and ensure services are brought closer to the people.

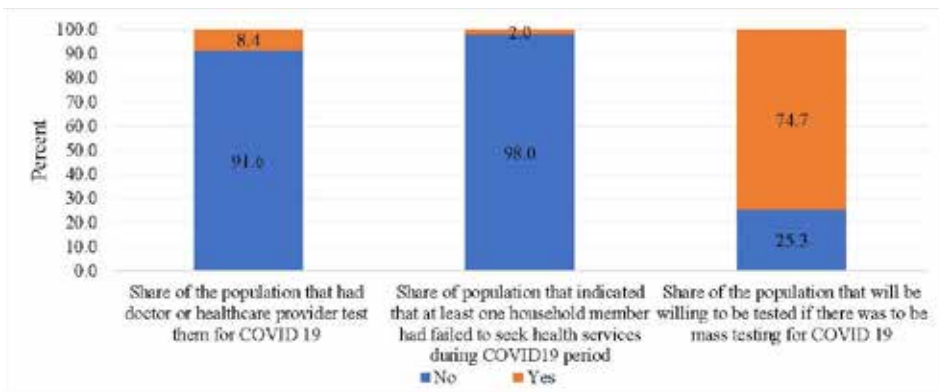
Surveillance has been very effective at the county especially border points. Setting up of isolation and quarantine centers has been successful. Health workers have been empowered through supply of PPEs, which are produced at KICOTEC. Provision of gun thermometers will help the county further enhance surveillance measures. The county has also procured ventilators. The county has an ICU with bed capacity of 5 in addition to other specialized beds. Community health workers have been instrumental in outreach programmes that is aimed at awareness creation among people on the importance of hand washing and others preventive measures.

In collaboration with partners, the county has managed to supply masks to every ward and in public places and has obtained sprayers to disinfect markets. Further, the county has set up washing hand booths at strategic places like hospitals and markets, public office and public areas, where the county has provided water tanks, soaps and sanitizers. The county

has also put effort in ensuring there is enough supply of water as well as reviving water points and continuous takes prompt measures to address water challenges where required.

In June 2020, Kenya National Bureaus of Statistics conducted a survey of COVID-19. The results showed share of the population that had doctor or healthcare provider testing or confirming to them the status in regards COVID-19 was estimated at 4.3 percent 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, only 5 percent of the population indicated that at least one household member had failed to seek health services and 72 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 need to be created among the county population.

**Figure 9.1: COVID-19 Testing, 2020**



Source: COVID-19 Wave 2 (June 2020)

As per the latest NYAS 2020 report, identified drug and substance abuse, sexually transmitted infections, HIV/AIDS, and teenage Pregnancy as the main health problems affecting youth in the county. These health problems were attributed to poverty, peer pressure, lack of knowledge and negative cultural practices. The consequences of these health problems included school dropout, death, poor health, and poor mental health.

Other health problems affecting youths are Malaria, abortion, abortion. Drug and substance abuse (DSA), malaria, mental health, malnutrition sexually transmitted infections such as HIV and AIDS. Some of contributing factors include idleness, lack of health education, negative cultures as highlighted above, parental negligence and lack of guidance, peer pressure, illiteracy and high poverty levels. The results of these problems are mental illness, suicide, school dropout, low economic and social productivity, low self-esteem, stigma, and premature deaths. Therefore, action need to be taken to prevent such from occurring. This can be achieved through parental guidance, economic empowerment, sex education, employment creation among the youths, early school enrolment and guidance and counselling.

Various sectors such as the private sectors laid off their workers, the informal sector was adversely affected with many rendered jobless. The county workers were working from home in adherence to government directives. The county has also recruited more health

workers who have been trained adequately on management of COVID-19 cases.

Other economic activities that they are involved in includes *boda boda* business, small-scale business, farming of livestock and banana farming. COVID-19 has affected most of the business activities. A good example is that of *boda boda* where one is required to carry only one passenger ensuring the passenger has mask and sanitized. This is on top of other challenges such as insecurity, poor road infrastructure, low levels of education and lack of capital.

The county government has hired more health workers during this period; this goes along in meeting the counties commitment to the Universal Health Coverage. With support of the national government and counties own initiatives trainings and awareness have been undertaken in order to build capacity of the health workers to enable enhance the mitigation measures required during this period. Tools of trade such as protective gears, masks have also been provided.

Lack of adequate health infrastructural facilities across the county, negatively impact on access and equity in the availability of essential health care aimed at promoting a healthy population that will effectively participate in the development of the nation. Those unable to access the health services are sometimes rendered economically unproductive. In cases where the sick person is the breadwinner, the family may become impoverished. This has led to high cases of dependency. Inaccessibility to health facility has also led to high mortality rates.

There are incidences of health facilities that are not being utilized especially those constructed under the various funding programmes. This is because they lack necessary equipment and are understaffed. Further, there are inadequate public education programmes to encourage Kenyans to change their lifestyles in ways that will improve the health status of individuals, families and communities.

The county is undertaking awareness to dissuade the fears among the public most of whom had stopped going to the hospital thus cutting the revenue stream. The local productions of masks have provided opportunity for revenue creation. The county was also experiencing challenges in meeting her local revenue collection. The county has been experiencing downward trend in revenue collection due to weak systems in place for collecting revenue. However, with more sensitization about COVID-19, people will resume looking for health services from the hospitals and other health centers. This will increase revenue collection in the county.

Main raw materials in the health sector are the services offered by health professionals and other employees. Medicine and drugs are also key materials. County is also producing masks, which are in high demand during this COVID-19 period. Access and provision of these materials were affected by the outbreak and spread of the virus, resulting to higher demand relative to the supply.

Most of the health services in health centres and dispensaries are government funded and so the facilities rely heavily on national share of the funding. To limit the spread of disease and create additional inpatient capacity and staffing, many hospitals initially closed outpatient departments and postponing or canceling elective visits and procedures. These changes, while needed to respond to the COVID-19 pandemic, potentially threatened the financial obligation of hospitals.



The county is also struggling with the health sector after devolution. There were no enough structures to handle the responsibilities given to the county government. There are no enough health workers to serve the large population in the county. In addition, there is a problem of procurement of medicine and other drugs as the counties are not allowed to procure for drugs themselves but are forced to buy from KEMSA. This sometimes results into delays in delivery of the needed drugs. The county also does not have adequate bed capacity to handle all her patients. It is in the wake of COVID-19 outbreak that the county has rushed against time to establish more ICU bed.

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 among the youths and adults.

Advancement in ICT also helps improve 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. Some countries such as Rwanda, drones are being used to deliver bloods. This is helping in mortality rate reduction. Good water and sewerage facilities also contributes greatly to reduction of diseases such as cholera, typhoid and other waterborne. This is because my maintaining good hygiene such as washing hands after visiting toilets, washing fruits before eating and boiling/treating drinking water.

Good disposal of waste by avoiding open defecation and using toilets also helps reduce spread of diseases spread through human waste. Agriculture sector also plays a key role in ensuring that people get 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 the females. This reduces cases of family conflicts and stresses, hence reducing mental diseases.

## **9.2 Opportunities with COVID-19 in Health Sector**

There is an enhanced collaboration within SEKEB counties, which has resulted into training of the health officers and all the frontline staffs. This collaboration has also seen enhanced intercountry screening and testing centralized at the Machakos Level 5 hospital. Additionally, due to reduced social contacts most of the meetings have been taking place virtually. This has provided an opportunity for the development of ICT. This has saved the county money which could have used in the movement from place to another, conference hall fee as well as accommodation for her staff. This has also promoted of ICT and other communication channels within the county hence speedy transfer of information.

The pandemic has also 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 lacked enough ICU beds. More attention is now being given to the sector leading to improved health services. The county has also received a number of donations in terms of bed and PPEs which have contribute to general improvement of the health sector in general.

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 spread of 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.

### **9.3 Recommendations**

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

- (i) The county to revamp, expand, modernize, and equip health facilities, including Mwingi Level 4 Hospital and the County Referral Hospital.
- (ii) The county to also recruit additional of public health officers and Community health workers to strengthen preventive and primary health systems.
- (iii) Invest in research and development by partnering with research institutions such KEMRI to spur innovation in health sector including in the area of medicine.
- (iv) Implement a comprehensive human resource health management system including undertaking training needs assessments and information system to ensure skilled and motivated health care workers are equitable deployed.
- (v) 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.
- (vi) Promote and support public and community health including the installation of hand washing facilities in homes and institutions such as schools, workplaces and health care facilities within the county.
- (vii) The county to always proactively address the mental health needs including those of the health workforce, mental illnesses from depression, especially in response to shutdowns, economic downturns, uncustomary care and burial of affected relatives.
- (viii) The county to ensure health workers needs are catered for including payment of salaries and allowances in good time. This will avoid strikes that disrupts service delivery especially this time of COVID-19.
- (ix) The county to establish 14 level 4 hospitals in Kitui and Mwingi and provide computerized tomography (CT) Scans on these hospitals; Modernize mortuaries, both in Kitui and Mwingi region; operationalization of amenity wards in Kitui County referral hospital and Mwingi Level IV hospital and upgrade Kitui referral hospital to level V; establishment of more level IV hospitals and Provision of adequate drugs and non -pharmaceuticals.

## 10 Education and Training

### 10.1 Characteristics of the Sector

#### *General Education Provision in the County*

The county has a total of 1,518 public and 308 private ECDE centers. In addition, the number of primary schools are 2,318 public and 158 private. Also, it has 374 public and 10 private secondary schools. In terms of youth Vocational training centers, the county has 52 of which 3 are not operational and a total of 311 adults and continuing education centres. Infrastructures are in place to support water and sanitation efforts in learning institutions by the county. The county has rolled out plans to provide hand washing facilities in schools in during the period of COVID-19.

Public primary schools in Kitui 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 103.1 per cent while that of primary school and secondary school was 115.2 and 72.2 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 males, 114.5 per cent, compared to that for females, 91.1 per cent. The GAR for primary school was higher for females, 116.4 per cent, compared to that for males, 114 per cent. The GAR for secondary school was higher for males, 79.8 per cent, compared to that for females, 63.3 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 total NAR for pre-primary, primary and secondary school was 66 per cent, 87.9 per cent and 31.4 per cent, respectively.

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

Education Level	Gender	Gross Attendance Ratio	Net Attendance Ratio
Pre-Primary School	Male	114.5	70.9
	Female	91.1	60.2
	Total	103.1	66.0
Primary School	Male	114	85.0
	Female	116.4	90.9
	Total	115.2	87.9
Secondary School	Male	79.8	30.3
	Female	63.3	32.7
	Total	72.2	31.4

Source: KIHBS 2015/16

#### Basic education gross and net enrolment rate

The pre-primary gross enrolment rate in the county was 92.1 per cent in 2019 and while the net enrolment rate was 55.5 per cent. The Gross Primary and Secondary enrolment rates stood at 120.4 per cent and 68.0 per cent respectively in 2019 while the Net enrolment rates (NER) were 84.5 per cent and 36.5 per cent for primary school and secondary school respectively during the same period.

**Table 10.2: Gross and net enrolment rate (per cent), 2019**

<b>Pre-primary</b>	2019
Gross Enrollment rate (GER) (%)	92.1
Net Enrollment rate (NER) (%)	55.5
Gender parity index	0.96
<b>Primary</b>	
Gross Enrollment rate (GER)(%)	120.4
Net Enrollment rate (NER) (%)	84.5
Gender parity index	0.97
<b>Secondary</b>	
Gross Enrollment rate (GER) (%)	68.0
Net Enrollment rate (NER) (%)	36.5
Gender parity index	1.07

Source: KNBS (2022)

High rate of school dropouts can be attributed to factors like 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 drugs 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 83 per cent with the male population being more literate (89.5 per cent) compared to their female counterparts (77.5 per cent).

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

	<b>Ability to Read and Write</b>	<b>Percentage Distribution (%)</b>
Overall county	Literate	83
	Illiterate	16.9
	Not Stated	0.2
	<b>Number of Individuals ('000)</b>	626
Male	Literate	89.5
	Illiterate	10.4
	Not Stated	0.1
	<b>Number of Individuals ('000)</b>	285
Female	Literate	77.5
	Illiterate	22.3
	Not Stated	0.2
	<b>Number of Individuals ('000)</b>	341

*Source: 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 57.2 per cent of the population do not have any educational qualification. This is high than the national percentage of 49.7. Only 1 per cent of the population has attained university degree. The proportion of the population with CPE/KCPE qualification is 27.4 per cent and that of KCE/ KCSE qualification is 7.6 per cent.

**Table 10.4: Percentage distribution of population by highest educational qualification**

Highest Educational Qualification	Percentage Distribution of Population
None	57.2
CPE/ KCPE	27.4
KAPE	0.3
KJSE	0
KCE/ KCSE	7.6
KACE/ EAACE	0
Certificate	2.3
Diploma	1.2
Degree	1
Basic/post literacy certificate	0.1
Other	0
Not Stated	3
Number of individuals ('000)	896

*Source: KIHBS 2015/16*

Percentage distribution of Kitui 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 61.1 per cent while that of females was 66.2 per cent. Except for primary school level and college (middle level), 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, 8.4 per cent of males and 7.8 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 2.3 per cent and 0.5 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 Kitui County (%)**

<b>Educational Level</b>	<b>Gender</b>	<b>Percentage Distribution of Population 3 Years and above</b>
Pre-primary	Male	8.4
	Female	7.8
Primary	Male	61.1
	Female	66.2
Post-primary vocational	Male	1.9
	Female	3.3
Secondary	Male	20.9
	Female	16.5
College (Middle-level)	Male	1.7
	Female	3.3
University	Male	2.3
	Female	0.5
Madrassa / Duksi	Male	0
	Female	0
Other	Male	0.1
	Female	0
Not Stated	Male	3.7
	Female	2.4
Number of Individuals ('000)	Male	447
	Female	449

Source: KIHBS 2015/16

According to the National Adolescents and Youth Survey (NAYS), 2014, drugs and substance abuse, child labour, absenteeism of teachers and students were the main education problems affecting young people. The participants attributed the problems to peer pressure among youth as well as poverty which leads to school dropout as students cannot afford school fees.

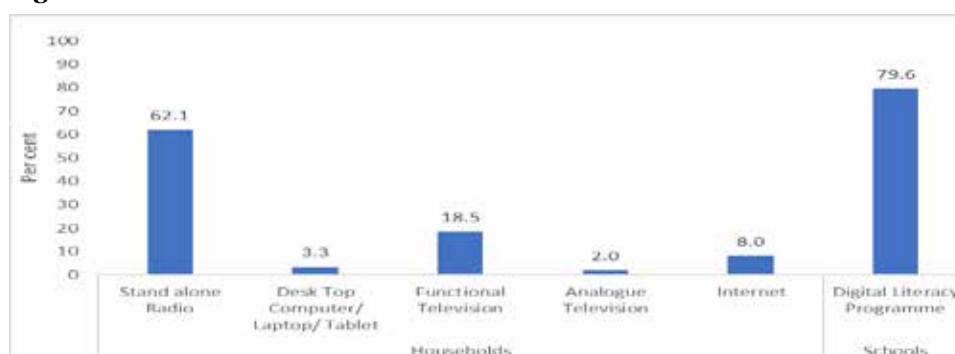
Just like other counties, many people in Kitui County lost their jobs because of the COVID-19 pandemic. Private schools were forced to lay off both teaching and support (casuals) staff because they could not sustain their salaries. Public schools faced challenges in making payment for the other expenses such as electricity, water and security bills. Apart from the other expenses, public schools could not pay teachers who were hired on contracts and were under boards of management.

Private schools in Kitui County were severely affected because of the COVID-19 pandemic because they could no longer receive income in form of school fees. Suppliers and vendors who sold their goods and services to schools lost their target market after the government ordered all schools to shut down.

## ICT in education

There is a major problem when it comes to access to e-learning materials because of the COVID-19 pandemic. With regards to access to ICT in Kitui County, 37.1 percent of households were found to have no access to stand alone radio. 3.3 per cent of households were found to have access to a desk top computer/laptop/tablet. Only 18.5 percent of the county households had functional television while 2.0 per cent still had analogue television. Only 8.0 per cent of households had access to internet. This means that adoption of e-learning program during the COVID-19 era was constrained due to limited access to ICT materials as only little number of households had the requisite tools for effective e-learning programme. This is despite a record 79.6 per cent of schools having installed digital literacy programme tablets.

**Figure 10.1: Access to ICT in households and schools**



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

Other challenges in the education sector include limited programmes aimed at improving online learning through radio and television, lack of enough funds to implement COVID-19 education in emergencies responds, limited number of partners offering mental health and psycho-social support among girls, boys and teachers and destruction of school infrastructure during this lock down period. These constraints are making it difficult for the government to sustain learning during this COVID-19 period.

## 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 VTCs hence creating employment and income for youth. It will however be important to address issues of standards and quality of the local produced PPEs. 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 Central 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 the 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**

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 when schools reopen; deployment of ECDE teachers, provision of sanitation facilities and enhanced school feeding programme. To achieve these objectives, the county to require to partner with the national government and private sector to enhance ECDE and vocation training through infrastructural development as well as equipment of all ECDE, primary, secondary, and vocational training, and University branches in the County with adequate WASH and adequate learning spaces upon reopening. High cases of school dropout especially transition from primary to secondary level of education. There is also the issue of drug and substance abuse among the students which need to address has it has great impact on education.

### **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 when schools reopen; deployment of ECDE teachers and provision of sanitation facilities.
- (ii) The county to involve communities to mobilize learners when schools will be reopening process and while deepening implementation of COVID-19 mitigation measures. The county to 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, also 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 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.
- (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 they are not idle especially this period when learning institutions are locked.
- (vii) Government need to come in and support private institutions which are facing threat of closure due to losses as a result 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, Kitui county has a population of 1,136,187 of which 7 per cent are the elderly and 2.7 per cent are people living with disabilities. The overall poverty rates in the county stand at 82 per cent which is higher than the national average of 36.1 per cent. The county's food poverty levels are at 48 per cent and 40 per cent of the total population is multidimensionally poor. Further, about 38 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 were the large rise in price of food (35.4) followed by Droughts or Floods which affected 26.4 of households. Other major shocks include Crop disease or crop pests, death of livestock and Severe water shortage which affected 9.3 per cent, 9.1 per cent and 4 per cent, respectively.

**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	26.4
Crop disease or crop pests	9.3
Livestock died	9
Livestock were stolen	2.6
Household business failure, nonagricultural	0.4
Loss of salaried employment or non-payment of salary	1.4
End of regular assistance, aid, or remittances from outside the household	0.9
Large fall in sale prices for crops	1.1
Large rise in price of food	35.4
Large rise in agricultural input prices	1
Severe water shortage	4
Birth in the household	-
Death of household head	1
Death of working member of household	1

Death of other family Member	1
Break-up of the household	1
Bread winner jailed	-
Fire	1
Robbery / Burglary / Assault	1
Carjacking	-
Dwelling damaged, destroyed	1
Eviction	-
Ethnic/ Clan Clashes	0
Conflict	0
HIV/ AIDS	-
Other	8
<b>Number of households with Shock</b>	<b>228,000</b>

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, 49 percent of the households received cash transfers. A higher proportion of households received transfers from within the country (91%), mainly from individuals (94%) while external transfers constituted 4 per cent.

		Beneficiaries
	Total Number of Households	236,000
	<i>Households receiving transfers (%)</i>	<i>49</i>
From Inside Kenya	Individual	26,686
	Non-Profit Institution	1,958
	National Government	2,115
	County Government	91
	Corporate Sector	153
Inside Kenya		31,003
Outside Kenya		434
Total		31,018
<b>Number of households that received transfers</b>		<b>115,000</b>

Source: KIHBS 2015/16

The vulnerable children groups/categories in the County can be listed as follow, Child headed households, Children living in extreme poverty, Children living with grandparents, orphaned children, Children at risk of FGM, child marriage, Children living with or affected by disability, child pregnancy, children living with HIV or at risk of infection, children living with HIV positive caregivers, children living with aged/elderly caregivers, Children dropping out of schools and single parent's children. The current statistics of vulnerable children per category shows that 5.5 percent of children under the age of 18 years and 3.8 percent under the age of 14 years.

Currently there is no kitty for relief and social protection/ cash transfer programme to support the vulnerable groups in the county. A significant portion of the budget had been committed to development projects. However, funds towards the social protection kitty have been factored in for the next financial year. The county has given business owners a grace period of two months but still little is forthcoming due to closure of business. Parking fees for Public Service vehicles was waved following a request to the county.

Several youths were rendered jobless due to COVID-19 which led to closing of business and other operations. This worsened the already bad situation about youth's unemployment. To cushion the youths, the government came up with the Kazi Mtaani initiative. The government injected Ksh 87 million for Kazi Mtaani in Kitui to cushion 2,743 most vulnerable citizens living in informal settlements from shocks occasioned by loss of livelihoods due to the COVID-19 pandemic. The county has more 20,000 unemployed youths. Under the National Hygiene Programme (NHP), dubbed Kazi Mtaani, the identified informal settlements include Mosquito, Majengo, Kalundu and Mjini in Kitui Town, whereas in Mwingi Town, the works were done in Mavoko and Kyanika.

Unemployment is one among many challenges that the youths are facing in Kitui county. The social and economic effects of the COVID-19 pandemic increased households' susceptibility to Gender Based Violence (GBV) in the county. Response measures taken to contain the COVID-19 pandemic, such as movement restrictions, lockdown and curfew hours, have led to loss of income, isolation, high levels of stress and anxiety exposing household members to psychological, economic, sexual violence and physical harm as couples spend more time in close contact. Other challenges affecting the youth include unemployment and drug use, especially alcohol and substance abuse.

Open air markets were closed which mostly serve as place of trade. Most people in these markets were women. This affected their welfare in terms of finances and access to food and other goods and eventual decline in living standards. Livestock markets were also closed making it hard for people to sell their livestock which serves as a main source of income. Shops and Kiosks, social centers such as club and bars, hotels were affected by the curfew and social distance requirements resulting in an increase in unemployment rates in the county.

Most of the social protection operations were undertaken through non-contributory transfers in cash for the elderly, OVCs and PWDS. In some instances, in kind transfers which include school feeding programmes were also used to reach a wider audience and age group.

The county revenue collection declined because of outbreak of COVID-19. The border points were closed hence no people were allowed to leave the county through them to other

counties. This has affected most businesses which serve as a source of income for many families. Resumption of services and free movement across borders and opening of markets will enable the county to collect bore revenue hence boosting her targets. 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 the 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 e.tc. Communication is key especially for the people in business as one need to place order for goods or services. ICT is also involved in record keeping of those people in schemes such as NHIF and NSSF as well as 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 also are aware of the need for and importance of engaging in social protection programmes such as insurance and investment for future to benefit after retirements. With good education, one can understand government role in ensuring good life for its citizens.

Agriculture is the main source of revenue in the country and most of the counties. Kitui is not an exception. Majority of people are involved in livestock keeping and farming. This provides people with source of food as well as revenue which is used to improve their welfare. Agricultural sector also creates employment among many county residents who would otherwise have been jobless. Trade and industry play an important role bettering life of the residents. This is where majority of people derive their livelihood from especially those engaging SMEs. The profits and savings obtained from business is used in feeding the family members as well as insuring them in future.

## **11.2 Opportunities with COVID-19 in social protection**

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, it has really exposed the 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 programs to cushion the vulnerable groups in the community in case of outbreak of other diseases.

### **11.3 Emerging Issues**

Due to social distancing and curfew hours, GBV victims had limited contact with family and friends who would act as the first contact persons during violence. Survivors also experienced challenges accessing healthcare services, counselling services and access shelters. These challenges underscore the need for deliberate measures at the county level to prevent and support GBV survivors in times of emergencies as experienced with the pandemic. Further, the pandemic has exposed the level of lack of comprehensive social protection at the county level.

### **11.4 Recommendations**

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 Kitui county government to:

- (i) Give tax exemption for the SMES who have suffered losses in their business as result of COVID-19. County government to create a kitty where they can collaborate with local banks in offering loans to the SMEs to restart and boost their businesses.
- (ii) Provide food and other basic wants to the elderly since their movement had been restricted as they were at great risk of contracting the virus.
- (iii) Promote the Universal Health coverage Programme (UHC), to support the vulnerable communities and register them under NHIF to help them access health service at a subsidized cost.
- (iv) Build linkages with other government agencies and with NGOs that work with people with disabilities and other vulnerable groups to strengthen family systems, deliver assistive devices for PWDs, reduce barriers to access and provide vocational training.
- (v) Design and implement a disability grant targeting all persons who are severely disabled, and who are above the age of eligibility for the OVC grant and below the age of eligibility for the old age cash transfer grant.
- (vi) Promote gender mainstreaming, protection, and response against gender-based violence and FGM.

## 12. Labour Participation

### 12.1 Characteristics of the Sector

#### *Sources of employment in the County*

Most of the economy is based on sustenance farming, even though the agriculture is an extremely challenging endeavor giving the sporadic rainfall. A logical move therefore would be a transition to non-agricultural industries. Other sources of employment are government departments, Non-Governmental Organizations, donor agencies and business organizations. There are few industries in the county, including a cotton ginnery where cotton farmers from around the county delivers their harvest. It is one of the major industries in the region and was set up way back in 1935. The county is semi-arid region and not many crops fare well there apart from cotton, hence the ginnery plays a major role creating income for the many cotton farmers in the region. In addition, the county has established a Kitui County Textile Centre (KICOTEC) which has promoted buying of local products and essentially supporting local businesses to grow especially the Small and Medium Enterprises (SMEs), which account a high percentage of the county's income. This has also reduced unemployment in the county. A small percentage is self-employed, and they engage in, jua kali, hawking and livestock selling among others 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 youths who makes the large portion of the unemployed.

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

	Male	Female	Total
Population	481,638	522,497	1,004,160
Working	218,838	267,636	486,486
Seeking Work/ No Work Available	19,558	12,342	31,902
Persons outside the Labour Force	243,184	242,430	485,625
Not Stated	58	89	147
% Working	91.8	95.6	93.8
% Seeking Work/ No Work Available	8.2	4.4	6.2

*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 the County population aged 15-64 years (labour force) was estimated at 518,388 people of whom 484,486 people were working and 31,902 were seeking work but work was not

available representing an unemployment rate of 6.2 per cent (Kenya Population and Housing Census, 2019).

### ***Effects of COVID-19***

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. 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, the lockdowns in Mombasa and Nairobi counties had a negative impact on long distance drivers in these sectors. The impacts of the pandemic were also felt on the service sectors as it affected workers in both private and public sector. Several people working in restaurants and bars were rendered jobless due closure as ordered by the government.

In education sector the workers employed by school Board of management (BOM) lost their jobs as well as those employed by Private schools as the schools could not sustain their salaries due to closure of schools. Public schools have also faced challenges in making payment for the other expenses such as electricity and security bills.

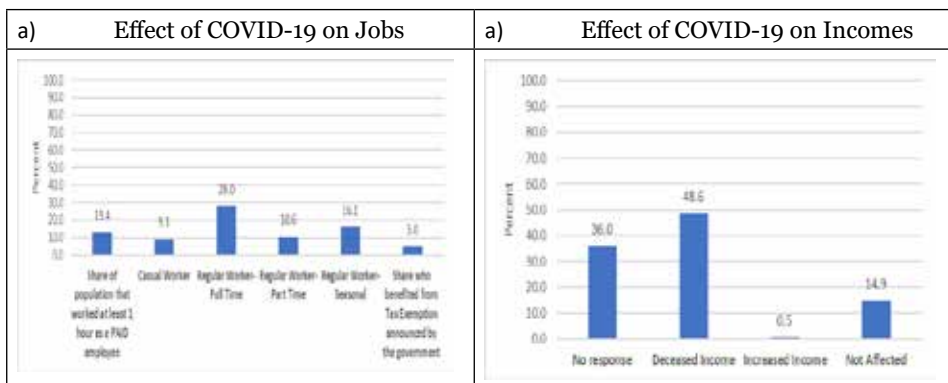
However, the employment and income opportunities are affected by several challenges in the county. The major challenges pointed out in the county include lack of knowledge and skills, lack of capital among the youth, high taxation and insecurity. The informal sector covers small scale activities that are semi-organized, unregulated and uses low and simple technologies while employing few people per establishment.

The unemployment has increased during the period of COVID-19, according to May 2020 KNBS COVID-19 Survey, 13.4 per cent of the county labour force worked at least for 1 hour for pay; 20.2 per cent had never worked, and 66.5 per cent worked in the informal sector. However, 7.8 per cent of employees did not attend to work due to COVID-19 with other 86.4 per cent of employees working without any pay. On average, workers in the County lost 11.9 hours per week due to COVID-19.

During the pandemic, about 9.1 per cent of workers in the county were casual workers 28.0 per cent were regular workers (full time), 10.6 per cent employees were working as part time. However, about 48.6 per cent reported decrease in income while only 0.5 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. About 5.0 per cent of workers indicated to have benefited from government tax exemptions which indicates about 95 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, 2020**

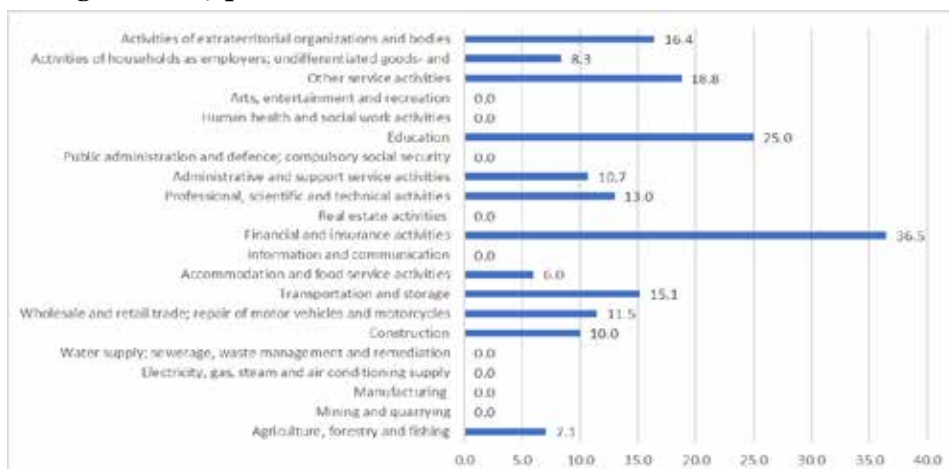


Source: May 2020 KNBS COVID\_19 Survey

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. County popular markets such as Kalundu and Kabati were closed 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 extraterritorial organizations and bodies recorded on 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 KNBS 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, 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, county lost 11.9 hours worked in a week and the hours lost in economic base of the county like service 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 to seek to complete and attain 100% 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 need 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, the 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 segment its workforces to include essential and frontline workers especially in health sector. As it continues, the county to 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) Deepen technical education, training and skills development.
- (ii) Improve the quality of MSMEs products and Research in Kitui County by partnering with research institutions like South Eastern Kenya University (SEKU) and the Productivity Centre at the Ministry of Industry.
- (iii) Promote investment and entrepreneurship through provision of loans. Kitui county need to improve access to finance for small and medium enterprises through lending institutions. In addition, build capacity in areas related to marketing, operations, finance, and human resource development to enhance the chances of survival of SMEs.
- (iv) Build workplace resilience to public health emergencies and outbreaks of infectious diseases in all Kitui County economic sectors.

## 13 Conclusion and Key Recommendations

### 13.1 Conclusion

#### *Fiscal policy*

Kitui County total revenue has significantly grown by an average of 12.43 per cent from Ksh 6.27 billion in 2013/14 to Ksh 11.72 billion in 2020/21. During 2019/20 the county received a total of Ksh. 9.71 billion representing 22 per cent decline compared to the amount received during 2018/19, following the adverse effects of COVID-19 pandemic. Monthly cash transfers from the National government have always had an increasing trend from January to June over the years. Conditional grants are also a source of revenue for financing county operations and has been growing over the years. During 2019/20, OSR collections during the first quarter amounted to Ksh 79.27 million, thereafter rising in the second and third quarters to Ksh 92.69 million and Ksh 144.43 million respectively. This represented 82.80 per cent growth between the first and third quarters. However, the county collected Ksh 91.91 million during the fourth quarter, representing 36 percent decline compared to Ksh 144.43 million realized during the third quarter of 2019/20 and 21 percent decline compared to Ksh 115.69 million realized during the fourth quarter of 2018/19. Similarly, the quarterly performance during 2020/21 remained low compared to other financial years. The significant decline in quarterly OSR collections during 2019/20 and 2020/21 was mainly attributed to the containment measures undertaken to curb the spread of Coronavirus which led to low economic activity in the county and waivers granted to cushion the residents from the adverse effects of the pandemic.

#### *Agriculture, Livestock and Fisheries*

The Agri-food analysis highlights 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 COVID-19 pandemic period, the County also suffered from livestock diseases. The County's agricultural productivity is also affected by: variable and extreme weather events; low agro-processing and value addition opportunities; water scarcity ; dependence of rain fed agriculture; low access to quality and affordable inputs; low crops, livestock, and livestock products marketing opportunities; low access to major off-farm services including extension, agricultural credit and insurance, climate and market information, and credit services; and pests and livestock diseases; farm losses and post-harvest waste; and poor and inadequate infrastructure. 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 surface water as well as water from springs, with low access to piped water, to minimize the risks of households missing water and access to safe water for drinking, it is important to put in place measures to ensure protection of water catchment areas for continuity of access to clean and safe water by households. The county has limited developed sewerage infrastructure in both rural, urban, and peri urban. 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***

Kitui County's Manufacturing, Trade and MSMEs momentum was disrupted by the COVID-19 pandemic as the containment measures associated with COVID-19 pandemic took a heavy toll on the sector. In sustaining growth and building resilience in this sector, it is important to strengthen trade and also 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.

### ***Infrastructure, housing and urban development***

The main means of transport used in the County is walking followed by motorbike. The paved County Road network covers 5.78 km, while the paved National roads cover 256.86 km. Out of the total paved road network of 262.64 km, 44.59 per cent is in good condition, 44.88 per cent in fair condition and 10.53 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 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 85.8 per cent, with 14.2 per cent of the households under rental tenure. Majority of households (92.5 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 3.0 per cent reporting a partial waiver, despite inability to pay, because of the pandemic.

### ***Tourism***

Kitui county lacks star-rated accommodation facilities. However, there are over a dozen registered facilities, mainly guest houses and medium size hotels located across the county. The county also has potential for enhancing tourism in the following areas which remains under-exploited; Sport tourism, Ecotourism, M.I.C.E, Cultural tourism. In the first CIDP period, 2013-2017, the accommodation and food services sub-sector accounts for only 0.21 per cent of the GCP. This implies the sector had not been prioritized. In the second CIDP period, the county allocated 6.92 per cent of the proposed total budget of Ksh 140,547.75 million to development of the Tourism, Sports and Culture sector. This will enhance contribution of tourism to the economy of Kitui County. Specifically, the county requires a tourism development master plan to allocate development resources and timelines effectively. There is need to allocate more resources to its development, especially MICE facilities and other niche products.

### ***Health***

COVID 19 has worsened the situation as far as youths 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 losing jobs and businesses due to the lockdown. Other problems facing youths includes teenage pregnancies, malnutrition, STI/ HIV and Aids, poor environment, drug and substance abuse and malnutrition

### ***Education and training***

The County had gaps in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities. The county recorded low completion rates at all levels of education.

### ***Social protection***

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

### ***Human resource***

The county to enhance investments and mechanisms for up skilling and reskilling, deepening technical skills as well as ICT skills; and retraining employees on how to work from home, where applicable. The county government to also 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***

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 Kitui County to 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. To improve on OSR contribution to the total revenue, the County need to develop and implement measures necessary for mobilization and sealing of revenue leakages. Leveraging on digitalization could also improve the OSR collection.

### ***Agriculture, Livestock and Fisheries***

To successfully build resilience and enhance growth of the agriculture sector, the County to: explore partnerships to develop agro-processing and value addition capacities at the County; expansion of water harvesting projects and sustainable irrigation; scale up conservation agriculture, post-harvest management, plant and keep drought-tolerant crops and livestock breeds; 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 to; increase water supply in households, institutions, and public places through drilling of boreholes, dams, and access to piped water in all the sub-counties. Promote the use of safe and improved toilets in schools, health care facilities, workplaces, and public places by connecting households to piped sewer. Promote handwashing as a measure to contain the spread of COVID-19.

### ***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. In sustaining growth and building resilience in this sector, it is important to expand trade and strengthen 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.

### ***Infrastructure, housing and urban development***

In addressing the prevailing challenges, the county to Identify a core rural road network for prioritization to improve the rural access index (RAI) from the current 56.0 per cent with a target to match the national average of 70.0 per cent; 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 42.9 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony; Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System. To be used in pandemic and disaster surveillance and emergency response.

### ***Tourism***

The strategies for re-engineering the county's tourism sector include Map all potential tourism sites in the County and developing a Kitui County tourism development masterplan, Tourism niche product development; Creating birdwatching tourism product; developing Nzambani rock ecotourism centre; developing viewpoints, Developing and implementing

a tourism promotion and marketing strategy; Promoting sports tourism products to empower the youth; promoting wildlife tourism; Promote cultural festivals; and domestic tourism, Improving on the tourism circuit connecting coast and Kitui County, Upgrading sports facilities to promote talent; setting up a sports council; leveling playgrounds in primary and secondary schools.

### ***Health***

For a resilient health sector, there is need for more awareness on immunization so that mothers can ensure their children get immunized. 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. Recruit additional of public health officers and community health workers to strengthen preventive and public health systems.

### ***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 to provide financial or in-kind support, such as school feeding, to help families overcome the increased costs of attending school and provide psychosocial support to teachers and learners during and after the pandemic.

### ***Social Protection***

COVID-19 pandemic created immediate and long-term economic consequences for vulnerable groups including children, PWDs, elderly and their families. To strengthen social protection response in face of a similar pandemic, the county government to need to provide basic income security, especially for persons whose jobs or livelihoods have been disrupted by the pandemic. Build linkages with other 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 appropriate labour market interventions especially those working Agriculture sector which is a major employer in Kitui county and policy reforms that drive employment creation. The County shall deepen technical education, training, and skills development.





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