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POLICY RESEARCH and ANALYSIS

Thinking Policy Together



Socio-Economic Status of Kilifi County with COVID-19

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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

The county total revenue has significantly increased over the years as the government focusses on enhanced services and amenities for the citizens. The total revenue has grown by 111 per cent from Ksh 6.42 billion in 2013/14 to Ksh 13.61 billion in 2020/21, an average annual growth rate of, 15.86 per cent. Conditional grants are a major source of revenue for financing county operations and has been growing over the years. The share of OSR to total revenue has been stable over time contributing an average of 6.02 percent of total revenue over the same period. In 2014/15 the county reported Ksh 269.3 million in pending bills. In order to achieve its overall goal of improving lives and livelihoods of its residents, the county government must quickly tackle the problem of pending bills. 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.

Agriculture, Livestock and Fisheries

Crop, Livestock and Fisheries activities account for a for a significant share of economic activity in Kilifi County. 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 and dependence of rain fed agriculture. 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 was emphasized by World Health Organization (WHO) as one of the frontline measures to curb transmission of COVID-19. This placed a higher demand for water use in households, schools, health care facilities, marketplaces, workplaces, and public places. This therefore necessitated the need for provision of water, sanitation, and hygiene by national and county governments to all. COVID-19 poses health challenges to water and sanitation officers if they get infected, they must be self-isolate, 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: establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, 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.

Infrastructure, Housing and Urban Development

The main means of transport used in the County is walking followed by PSV matatus. The paved County Road network covers 38.2 km, while the paved National roads cover 318.33 km. Out of the total paved road network of 356.53 km, 74.1 per cent is in good condition, 23.3 per cent in fair condition and 2.3 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, lack of knowledge and skills on internet and the high cost of services are the leading reasons that the people of in the County do not have internet connection. The housing tenure is predominantly owner occupied at 66.9 per cent, with 33.0 per cent of the households under rental tenure. Majority of the households (92.0%) did not receive a waiver or relief on payment of rent from the landlord, despite inability to pay due to the pandemic.

In addressing the emerging challenges, the county to Integrate sea-based transport with land-based transport to create multi-modal transport systems; Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund as a “last resort” in providing ICT access in remote areas where market forces fail to expand access; and integrate the blue economy in spatial planning for human settlements and urban areas along the Indian Ocean with the objective to balance sea-based and land-based activities livelihoods.

Tourism

Annually, the county receives around 150,000 tourists, some of whom are accommodated in the over 378 registered facilities with an estimated bed capacity of 12,085. Out of these hotels there are 11 star-rated hotels with a total capacity of 739 rooms and 1495 beds. There are 367 other unclassified accommodation facilities accounting for 91.5 per cent of the bed capacity, that include Hotels, Villas, Cottages, lodges and Guest houses. Accommodation and food services contributes only 1.2 per cent of the total GCP despite the county’s rich endowment in hospitality infrastructure. The county government planned to allocate Ksh 4.018 million of the proposed Ksh 392,026 million (1.02%) to tourism development and promotion during the 2018-2022 planning period. This is meagre in relation to the strategic importance of tourism to the county economy. Re-engineering the tourism sector in Kilifi County to include optimization of existing tourist attraction sites for maximum benefits; preserving and conservation of historic and cultural tourist attraction sites; explore new tourist attraction sites; promoting production of basic requirement in hospitality sector.

Health

The doctor-patient ratio in the County stands at 1:10,000 against the WHO recommendation of doctor-patient ratio of 1:230. In addition, the nurse-patient ratio for Kilifi County stands at 1:2,500 against the Kenya national standard of 1:6,000 and WHO standard of 1:230. Health Department has 1,449 health workers, which accounts for 40 per cent of the total workforce in the County Government. In 2019/2020, the number of health facilities in the county were 366 which comprised of 352 primary health facilities and 14 hospitals. This was an improvement from a total of 199 health facilities in the previous year, 2018. In general, 17.8 per cent of the county population had some form of health insurance cover. In the 2015/16 KIHBS, women in the county were asked the place where children aged 5 years and below were delivered. The county had 44.2 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 5.8 per cent were fully immunized against measles at 18 months. In line with the health status in the county, the government to promote construction, upgrading and equipping of health facilities through additional funding to health sector, to enable the achievement of quality and affordable health care; 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 fear of contracting COVID-19 in event of visiting an health facility and; promote the use of telemedicine, toll free lines, virtual meetings and trainings, as an alternate means of offering health care services and increasing access to health care services by the community.

Education and Training

Kilifi County has a total of 1609 pre-primary centers, 756 primary and 249 secondary schools. 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 preparation for re-opening. The Gross Attendance Rate (GAR) for pre-primary school was 127.1 per cent while that of primary school and secondary school was 105.9 and 44.3 per cent respectively in 2015/16. The pre-primary gross enrolment rate in the county was 127.1 per cent in 2018 and while the net enrolment rate was 64.7 per cent. 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. The proportion of literate population in the county was 80.1 per cent with the male population being more literate (90.7%) compared to their female counterparts (70.4%). With regards to access to ICT in Kilifi County, 37.1 per cent 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. Among other things, the County with support from stakeholders to continue investment in early childhood development through infrastructural development deployment of ECDE teachers and provision of sanitation facilities.

Social Protection

Kilifi County has a total of 88,202 desegregate Orphans and Vulnerable children (OVCs) who live in different parts of the county. Currently a total of 35,000 children drawn from 11,222 households benefit from cash transfers. This implies that 60.3 per cent of the total (OVCs) is not covered by the social protection interventions, and therefore they are disfranchised by poverty and other kinds of vulnerabilities. Severe shocks have had negative impact to the household's economic and social welfare of county residents. 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. 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. 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 county government to ensure continued/scaled up and coordinated delivery capacities of social protection and humanitarian crisis response programmes and; ensure that all OVCs have equitable access to social protection interventions to secure their rights to social security which include the right to health, education, adequate housing, sanitation, access to clean and safe water in harmony with the provisions of Article 43 of the constitution.

Labour Participation

Tourism and fishing are the main economic activities in the county. This is due to her proximity to the Indian Ocean which is good for fishing and tourist attraction. The county boasts of the best beaches and popular resorts and hotels. The pandemic has affected the industry as demand from the hospitality, restaurant and catering sector represents a significant share of fish consumption in the county. 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. In addition, the reduction in operation hours and restriction on movement in and outside Nairobi and Mombasa County had negatively impacted on the transport sector with many relying on it rendered jobless. During the pandemic, about 5.0 per cent of workers in the county were casual workers 32.9 per cent were regular workers (full time), 4.1 per cent employees were working as part time. However, about 44.1 per cent of workers reported decrease in income while only 0.9 per cent of people reported to have experienced increased income. Opportunities within the Jumuiya ya Pwani regional economic block needs to be exploited to enhance economic competitive advantage. There are emerging talents among the youths which can tapped to benefit the county especially this time of COVID-19 such as making of ICU bed, masks and PPEs. The county to design and implement an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 control restrictions; create more employment opportunities through investment in education and training and skills development; and investments within the key sectors of tourism, agriculture, technology and innovation and invest in community and primary health including community health workers, water, sanitation, immunization and public health.

1. Introduction

1.1 Population Dynamics

Kilifi County is one of the counties in Jumuiya ya Pwani Economic Bloc. The county occupies a land area of 12,609.7 km². The county has a population of 1,453,787 people comprising of 48.3 per cent male and 51.6 per cent female (KNBS, 2019). Of the population 20,064 (1.6%) are persons with disabilities. The youth constitute 35 per cent of the population. The county has a population density of 116 per km². About 72.9 per cent of the population live in rural areas of whom 51.6 per cent are female. The elderly population (65 year and above) make up 3.8 per cent of the total population of whom 57.1 per cent are female. The population in school going age group (4-22 years) was estimated at 49.0 per cent in 2019 (Table 1).

In 2015/2016, the overall poverty rate in Kilifi County was estimated at 46 per cent against the national poverty rate of 36.1 per cent. In addition, 47.3 per cent of the population were living in food poverty and 58.8 per cent 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 KDHS 2014, 39.1 per cent of the children were stunted as compared to the average national level at 26 per cent.

Table 1.1: Development indicators in Kilifi County

	County	National
Estimated County Population (KNBS, 2019)	1,453,787	2.4% of total population
Male	704,089	48.5%
Females	749,634	51.4%
Intersex	25	0.02%
Estimated Population Density (km ²)	116	82
Persons with disability	1.6%	2.2
Population living in rural areas (%)	72.9%	68.8%
Children (0-14 years) (%)	43.6%	41.1%
School going age (4-22 years) (%)	49%	68.7%
Youth 15-34 years (%)	35%	36.1%
Labour force (15-64 years) (%)	52.2%	55.0%
Elderly population (over 65-year-old)	3.8%	3.9%
Number of COVID-19 cases (as of 11 th September 2020) (MOH); National cases were 35,232 people	179	0.5% of the national cases

Poverty (2015/2016) (%)	46.0%	36.1%
Food Poverty (2015/2016) (%)	47.3%	31.9%
Multidimensional Poverty (2015/2016) (%)	58.8%	56.1%
Stunted children (KDHS 2014)	39.1%	26%
Gross County Product (Ksh million) 2020	204,172	2.2% Share to total GDP
Average growth of nominal GCP (2013-2020) (%)	12.5%	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 515,563 individuals. They are followed by persons aged between 6-13 years who are the primary school children comprising of 330,796 of the county population. The under 0-3 age comprise of 158,678 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	79,633	79,045	158,678
Pre-primary school age (Under 4-5)	43,191	42,482	85,673
Primary School Age (6 -13)	165,979	164,817	330,796
Secondary school age (14-17)	74,111	72,664	146,775
Youth Population (15-34)	243,864	271,699	515,563
Female Reproductive age (15-49)		360,344	360,344
Labour force (15-64)	371895	412174	412,174
Aged Population 65+	23,963	31,925	55,888

Data Source: KNBS (2019)

1.2 Level of Socio-Economic Deprivations

In 2015/2016, 17.8 per cent of the population had health insurance cover, 28.3 per cent lived in premises with water, 65.6 per cent lived in their own homes and 76.4 per cent had access to mobile telephone (Table 1.3) and majority of the households (83.4%) had access to toilet facility. As a result, the multi-dimensional poverty is 58.8 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	17.8
Drinking water (Time taken to fetch)	Zero (In premises)	28.3
	Less than 30 minutes	63
	30 minutes or longer	6
Sanitation and Hygiene	Proportion of households with toilet facility	83.4
	Shared Toilet	70
	Not Shared	30
	Place to wash hands outside toilet facility	17.2
	No place to wash hands outside toilet facility	81
Education (Population 3 years and Above by School Attendance Status)	Ever Attended	87.5
	Never Attended	11.8
Knowledge of health and nutrition (children aged 0-59 months that participated in Community Nutrition Programmes)	Participated in Community Nutrition Programmes	24.2
	Did not Participated in Community Nutrition Programmes	69.4
Housing and standard of living (house ownership)	Owner Occupier	65.6
	Pays Rent/ Lease	30.2
Access to information (Population Aged 3 years and above by ICT Equipment and Services Used)	Television	57.7
	Radio	84.1
	Mobile phone	76.4
	Computer	8.7
	Internet	13.2

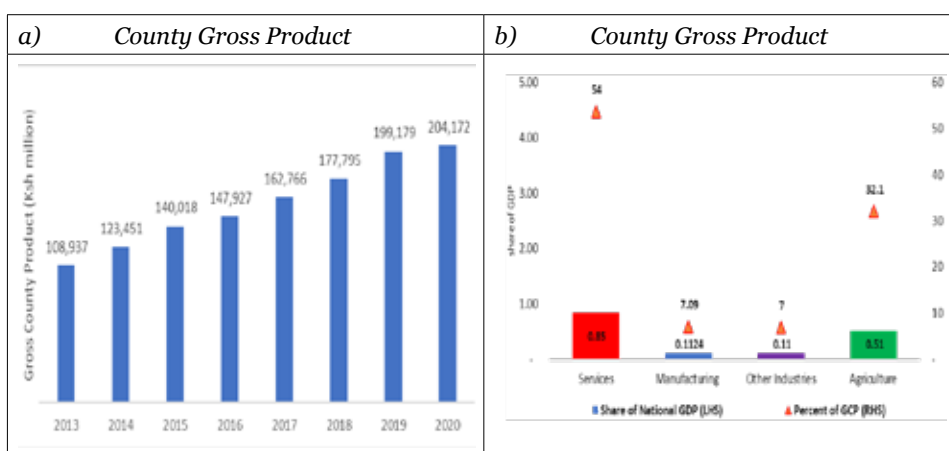
Source: KIHBS 2015/16

1.3 Structure of Kilifi County Economy

Kilifi County Gross County Product (GCP) accounted for 2.2 per cent of total Gross Domestic Product (GDP) between 2013 and 2020. The GCP increased from Ksh 108,937 million in 2013 to Ksh 204,172 million in 2020 representing an average annual growth rate of 12.5 per cent.

The service sector contributed 54.0 per cent of GCP while agriculture, manufacturing and other industries constituted 32.1 per cent, 7.1 per cent and 7.0 per cent, respectively. The services sector includes such activities as wholesale, retail trade and tourism. Agriculture is mainly dominated by crop and livestock farming, while manufacturing is dominated by the small-scale *production* of consumer goods, such as plastic, furniture, and textiles; food processing; oil refining; and cement production.

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



Data Source: KNBS (2021)

1.4 COVID-19 caseload and implications of mobility restrictions

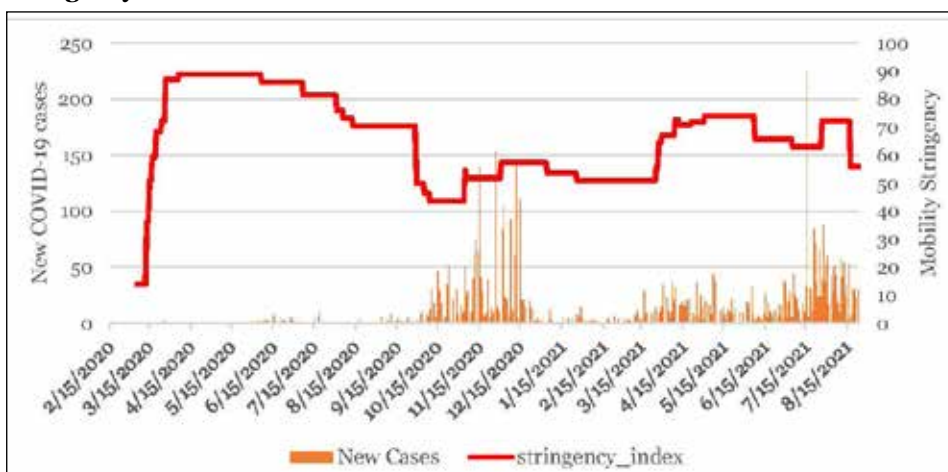
As of March 2020, Kilifi County had zero cases. However, by August 2020, the County had reported 82 COVID-19 cases with mobility stringency of 70.4. The caseload would rise to 5,198 by August 2021 with mobility stringency of 56.0. The mobility stringency index is a composite measure rescaled to a value 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: Total COVID-19 cases in Kilifi County and the country's mobility stringency

Date	Total cases	Mobility stringency (0-100)
13 th March 2020	0	36.1
23 rd August 2020	82	70.4
23 rd August 2021	5,198	56.0

Source: Oxford University

New COVID-19 cases in Kilifi County were highest between September 2020-December 2020 and February 2021-August 2021. During the two 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.

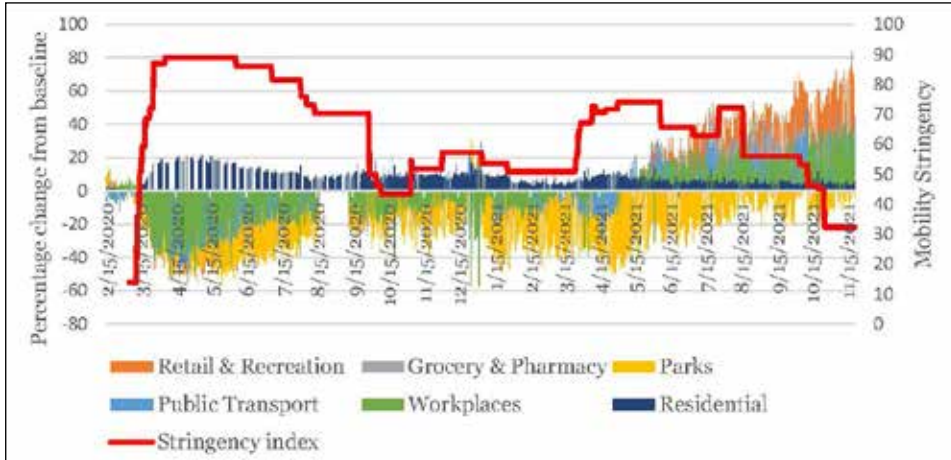
Figure 1.2: New COVID-19 cases in Kilifi County and the country's mobility stringency

Source: Oxford University

Demand for parks, workspaces, and public transport were the worst hit by mobility restrictions in Kilifi County. Retail and recreation, public transport, and workspaces have

been the greatest beneficiaries of less stringent mobility restrictions in the County. Demand for residential space has been the most resilient in the County during the COVID-19 period.

Figure 1.3: Effects of COVID-19 on Kilifi economic performance and national mobility stringency



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, planning and budgeting; 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 human resources and chapter 13 concludes the report.

2. Socio-economic Effect of COVID-19

2.1 Fiscal Policy

2.1.1 County Revenue Analysis

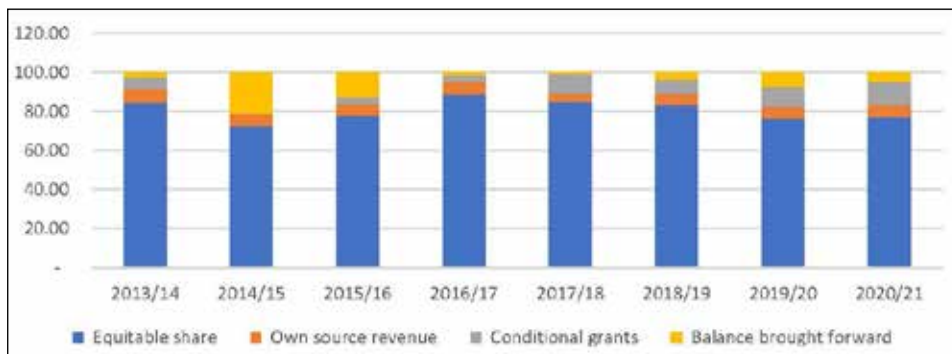
Availability of financial resources is very critical in achieving the counties development plans and settling county expenditures. The County's main revenue sources comprise of the transfers from the National Government, Conditional Grants and its own source revenue (OSR).

2.1.2 Transfers from the National Government

The county total revenue has significantly increased over the years as the government focusses on enhanced services and amenities for the citizens. The total revenue has grown by 111 per cent from Ksh 6.42 billion in 2013/14 to Ksh 13.61 billion in 2020/21, an average annual growth rate of 15.86 per cent. The total amount realized in 2020/21 was 92.8 per cent of the annual budget allocation of Ksh 14.46 billion. The performance was an improvement from 83.2 per cent target attained in 2019/20.

Analysis of the sources of revenue indicate that equitable share from the National Government has been the main source of county funding accounting for more than 72 per cent of the total revenues (Figure 2.1). On average, equitable share contributed 80.78 per cent of the total revenue between 2013/14 to 2020/21, underscoring its importance in financing county operations

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 has been exhibiting 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 cash transfers growing by 73.3 per cent from Ksh 5.96 billion received

in January to Ksh 10.3 billion received in June. In comparison to 2019, the total amount transferred to Kilifi County between January and June in 2020 increased by 8 per cent from Ksh 45.4 billion realized in 2019 to Ksh 48.99 billion received in 2020. The increasing monthly transfers from the National Government was a welcomed move by the County Government owing to its financial requirements to execute its budgetary obligations as well as implement the necessary measures to curb the spread of the COVID-19 and cushion businesses.

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

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
2021	-	-	-	-	-	-	2,910.40	-	-
2020	5,955.07	6,981.75	7,817.31	8,932.32	9,003.84	10,318.88	2,621.57	3,133.85	4,115.89
2019	4,821.79	5,723.06	6,768.88	7,783.89	8,700.53	11,589.93	8,700.53	2,679.11	3,776.08
2018	4,293.19	4,328.39	5,971.14	6,866.72	7,748.83	10,215.60	1,333.01	2,324.66	3,738.49
2017	-	-	5,419.69	6,062.02	6,744.50	8,036.93	1,393.13	-	-
2016	-	-	4,368.64	5,633.65	6,266.15	6,266.15	-	-	-

Data source: Gazette Notice (Various issues)

2.1.3 Conditional grants

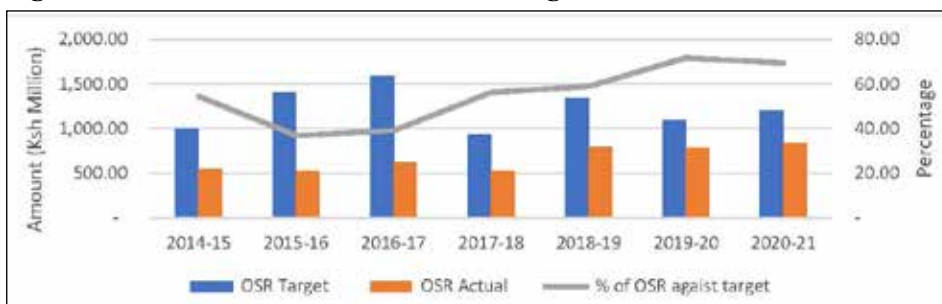
Conditional grants are a major source of revenue for financing county operations and has been growing over the years. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA), European Union (EU) and Sweden. During 2020/21, the County received Ksh 554.01 million and Ksh 1.08 billion from National Government and Development partners respectively. The share of conditional grants to total revenues has maintained an upward trend since 2014/15 (Figure 2.1). The contribution of conditional grants to total revenues increased from 0.15 per cent in 2014/15 to 10.29 per cent in 2019/20. On average, it contributed 6.62 between 2013/14 to 2020/21. With the growth achieved, the County needs to maintain good relations, and comply fully to the requirements of its development partners to continue benefiting from the conditional grants.

2.1.4 Own Source Revenue

The share of OSR to total revenue has been stable over time contributing an average of 6.02 per cent of total revenue over the same period. The county recorded the highest share of OSR to total revenue of 7.15 per cent in 2013/14 before declining over the years to a low of 4.48 per cent in 2017/18 (Figure 2.1). During 2019/20, the County experienced significant improvements with the contribution of OSR to total revenue increasing to 6.30 percent. Going forward, it would be important for the county to strengthen its OSR collection framework as well as policies to maintain the upward trajectory and increase on its contribution to the total revenues.

Analysis of annual County OSR performance shows a relatively stable trend over the years with marginal declines during 2015/16 and 2017/18 (Figure 2.2). The county registered improved performance in annual OSR collections from a low of Ksh 519.08 million in 2015/16 to a high of Ksh 792.49 million in 2018/19. The performance of actual OSR versus target indicate that the county has maintained an upward trajectory, registering improvements from attaining only 36 per cent of its targets in 2015/16 to achieving 71 per cent of its targets during 2019/20 (Figure 2.2). During 2019/20, the county generated Ksh 788.78 million from OSR, which was 0.1 per cent increase compared to Ksh 787.78 million realized during 2018/19. The marginal increase was remarkable considering the adverse effects of COVID-19 pandemic that affected economic activities in the county hampering revenue generation and collection. Similarly, in 2020/21, the County recorded an increase of 5.4 per cent in OSR generated compared to 2019/20. The performance show that the County's resilience during the pandemic period.

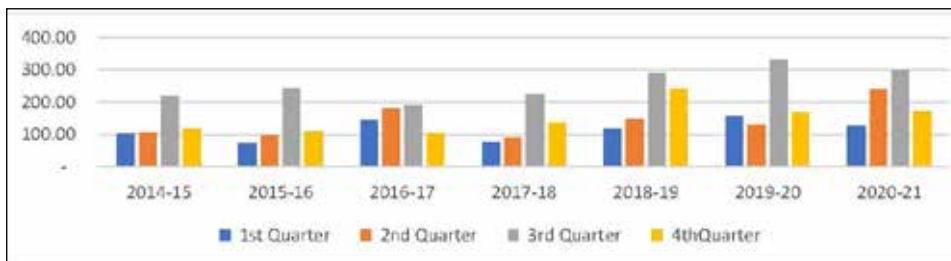
Figure 2.2: Annual Own Source Revenue targets and actual collections



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

Analysis of the quarterly OSR collections show that the county collects most of its OSR during the third and fourth quarters (Figure 2.3). This may be attributed to the timeline of single business payments which elapses on 31st March of every year. During 2019/20 the quarterly performance was robust as compared to other financial years. The county registered a growth of 110 per cent in OSR collections from Ksh 157.91 million realized during the first quarter to Ksh. 331.39 million collected in the third quarter. During the fourth quarter the OSR collected amounted to Ksh 169.28 million, representing a 49 per cent decline compared to third quarter collections. The fourth quarter decline was attributed to the adverse effects of the COVID-19 pandemic that slowed down economic activities in the County. Further, the County had extended the payments of single business permit from March to September 2020, a factor that led to the reduction in targeted collections for the financial year. During 2020/21, the quarterly collections remained robust, with the County collecting the most revenue during the second and third quarter. In overall, Kilifi County OSR performance indicate that the County remained resilient during the COVID-19 pandemic period as the Country experienced low economic activities.

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.

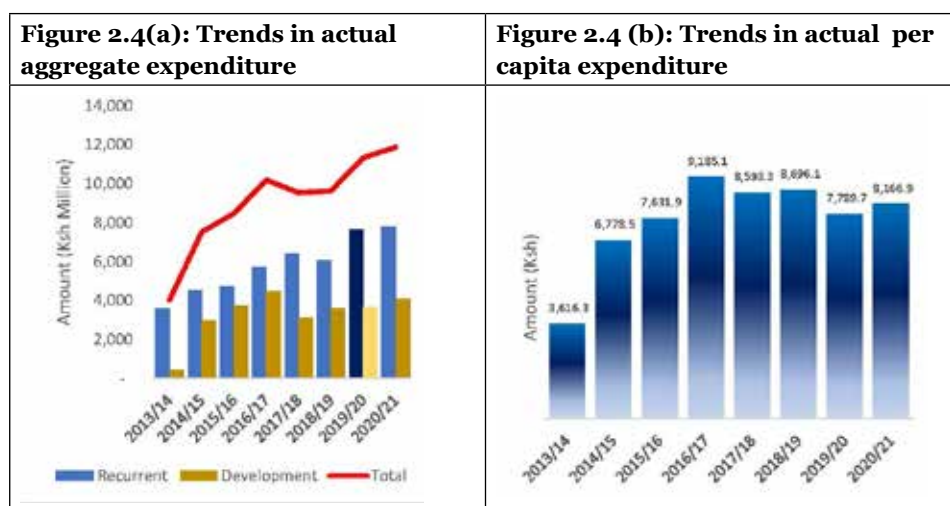
The UN Sustainable Development Goals (SDGs) emphasize the productive role of targeted and strategic county level expenditure. The 2014 UN Secretary General’s Synthesis Report on the Sustainable Development Goals (SDGs) states that “many of the investments to achieve the sustainable development goals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

Despite their constrained fiscal autonomy (e.g. 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.

2.2.1 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 4,013.1 million to Ksh 11,873.0 million in 2020/21, translating to an average annual growth rate of 14.23 per cent (Figure 2.4).. Cumulatively the county has spent a total of Ksh 72.6 billion between 2013/14 and 2020/21. This comprises of a cumulative Ksh 46.5 billion and Ksh 26.1 billion on recurrent and development expenditures representing 64.1 per cent and 35.9 per cent of the cumulative recurrent and development expenditure respectively. This signals that development expenditure performance is relatively weak and there is even a greater opportunity to push development expenditure higher and support deepening of capital spending in the county.

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

Figure 2.4: County expenditure analysis

Source: KIPRA based on Office of the Controller of Budget

Consistent with the nominal growth in actual county expenditures, spending on a per capita basis has more than doubled over the period. In 2013/14, per capita spending in the county was about Ksh 3,616.3 compared Ksh 8,696.1 in 2018/19 and Ksh 8,166.9 in 2020/21. Between 2013/14 and 2020/21 per capita spending averaged Ksh 7,557.2.

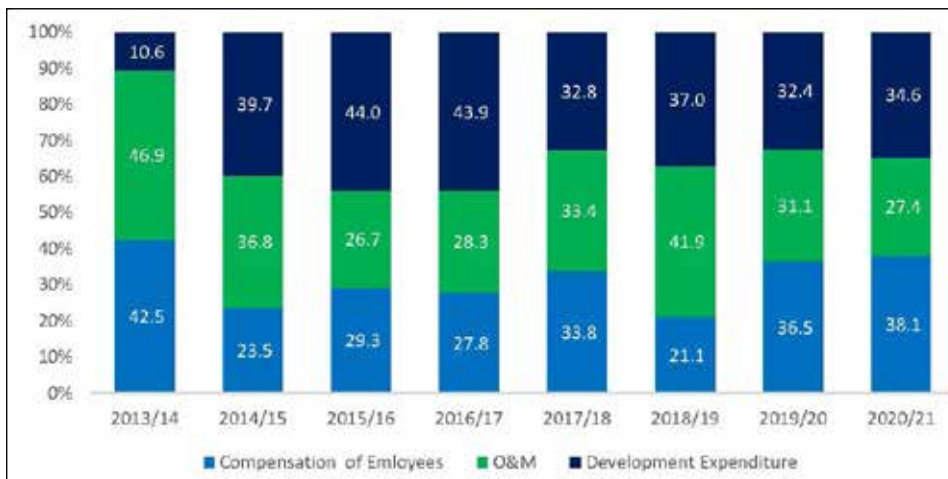
2.2.2 Utilization of public resources in the county

Analysis of expenditures by economic classification and by departments (spending priorities) reveals since inception of devolution, the county government prioritized narrowing the economic and social infrastructure gaps. Much of government spending has mainly been on provision of health services, roads, transport and public works as well as agriculture, livestock and fisheries among others.

The average development spending accounted for 34.4 per cent of total expenditure. In 2013/14 development expenditure accounted for 10.6 per cent. This increased to 39.7 per cent in 2014/15 and 44.0 per cent in 2015/16 staying above the 30 per cent albeit on a declining trend reaching 37.0 per cent in 2018/19 as presented in Figure 2.5. At the end of 2020/21 development expenditures accounted for 34.6 per cent of county total spending reflecting the needed intensity of capital expenditure deepening in the county.

Compensation of employees remained below 40.0 per cent save for fiscal year 2013/14 when it accounted for 42.5 per cent of total expenditure. The average share of compensation of employees in total county expenditure over the review period was 31.6 per cent.

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



Source: KIPPRA based on Office of the Controller of Budget

Reflecting on expenditures by functional classification or priority spending (Figure 2.6), the county spent a combined average of 81.9 per cent of the total expenditure during the period 2014/15 to 2020/21 on non-administrative and non-coordinational functions such as county health services (26.3%); roads, transport and public works (14.6%); education, sports and youth affairs (11.5%); water, environment and natural resources (8.9%); agriculture, livestock and fisheries (6.2%); lands physical planning and housing and energy (4.0%); trade, industry, tourism and co-operative development (2.4%); and ICT, E-Government, Culture and Social Services (2.1%).

Further during the review period, coordinational and administrative functions accounted for a combined average of 18.1 per cent with county assembly leading at 8.7 per cent, devolution, county executive services at 4.6 per cent, finance and economic planning at 4.4 per cent while county public service board accounted for 0.4 per cent.

Table 2.2: County departmental expenditure

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Average spending	Average share of spending (%)
County Health Services	1,922.8	2,262.7	2,496.7	2,869.0	1,919.3	3,065.3	3,480.0	2,573.7	26.3
Roads, Transport and Public Works	853.8	1,296.0	1,728.7	1,634.9	1,531.6	1,592.6	1,385.0	1,431.8	14.6
Education, Sports and Youth Affairs	1,103.3	1,041.5	1,303.3	919.4	1,060.1	1,144.9	1,299.0	1,124.5	11.5
Water, Environment, Natural Resources and Solid	301.3	736.9	1,130.3	880.9	963.1	870.8	1,203.0	869.5	8.9
County Assembly	679.2	821.6	883.1	682.6	1024.19	962.5	909	851.7	8.7
Agriculture, Livestock and Fisheries	427.1	566.6	582.2	386.0	686.1	779.4	819.0	606.6	6.2
Devolution, Public Service & Disaster Management	76.2	418.3	667.3	725.5	584.0	815.2	671.0	565.4	5.8
County Executive	814.6	352.3	300.9	421.3	402.7	412.4	434.0	448.3	4.6
Finance and Economic Planning	380.6	350.3	331.3	365.0	404.6	573.1	587.0	427.4	4.4
Land, Housing, Physical Planning & Energy	585.2	241.7	319.7	265.1	515.0	333.2	500.0	394.3	4.0
Trade Industrialization, Cooperatives, Tourism and Wildlife	150.0	177.5	205.4	198.9	267.8	353.7	322.0	239.3	2.4
ICT, E-Government, Culture and Social Services	228.2	178.9	181.2	137.9	222.9	341.6	174.0	209.2	2.1
County Public Service Board	-	25.3	54.1	42.0	60.3	60.6	54.0	42.3	0.4
Kilifi Municipality	-	-	-	-	-	11.93	16	4.0	0.0
Malindi Municipality	-	-	-	-	-	7.43	20	3.9	0.0
Total	7,522.3	8,469.4	10,184.2	9,528.2	9,641.7	11,324.6	11,873.0	9,791.9	100.0

Source: KIPPRA based on Office of the Controller of Budget

2.2.3 Effectiveness of county spending

Overall budget execution averaged 73.4 per cent in the period 2013/14 to 2020/21. In 2013/14 overall total budget execution stood at 59.9 per cent. This execution improved to 76.2 per cent in 2014/15 and reached a turning point at 78.6 per cent in 2017/18 before falling to 66.6 per cent in 2018/19. At the end of 2020/21 overall absorption stood at 81.0 per cent. This means that in 2020/21 only Ksh 11,873.0 million was utilized out of the approved budget of Ksh 14,662.0 million (Figure 2.6(a)).

With regards to development budget execution in the county, the average absorption rate between 2013/14 to 2020/21 was 61.0 per cent (implying that on average over 39.0 per cent of the development budget is not absorbed). This is a major budget implementation weakness, and the county should continue tightening budget implementation to ensure achievement of greater absorption rates to help achieve the targets in ADPs and the CIDP.

On recurrent expenditure, the execution has been robust over the years, the average absorption rate has been 81.7 per cent leaving about 18.3 per cent of unspent recurrent budget. With COVID-19 era, the county increased its efforts in provision of support to businesses and families and as the county improved its level of preparedness to combat increased COVID-19 contagion.

Figure 2.6: County expenditure and absorption rates

Figure 2.6(a): Approved versus actual county spending (Ksh Million)

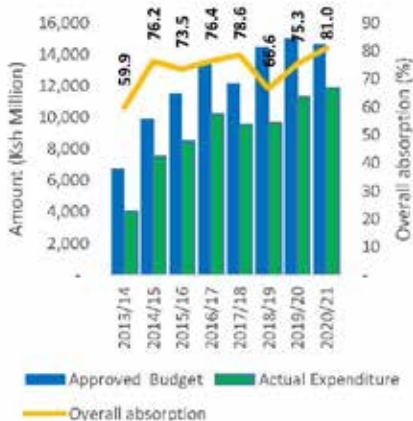
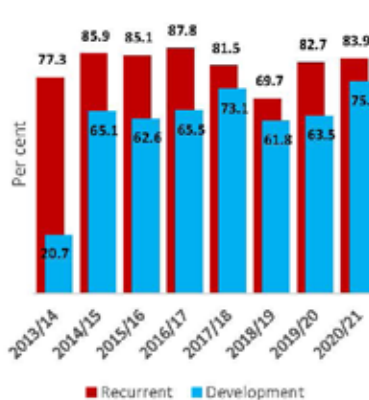


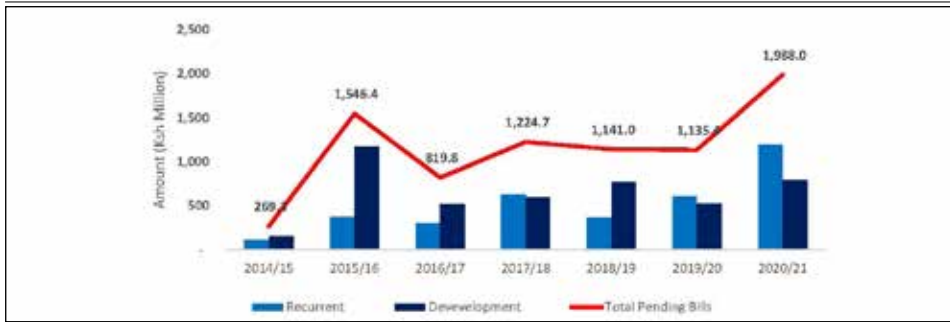
Figure 2.6(b): Absorption rates for recurrent and development expenditures (%)



Source: KIPRA based on Office of the Controller of Budget

2.2.4 Pending bills

Pending bills in Kilifi County generally follow an upward trend. In 2014/15 the county reported Ksh 269.3 million in pending bills. This increased to Ksh 1,546.4 million in 2015/16 with development related pending bills accounting for 75.9 per cent of this. Pending bills declined to Ksh 819.8 million in 2016/17 then ascended to Ksh 1,224.7 million in 2017/18 before decelerating to Ksh 1,141.0 million in 2018/19. At the end of 2020/21 pending bills



Source: KIPPRA based on Office of the Controller of Budget

In order 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.

3. Agriculture Livestock and Fisheries

3.1 Characteristics of the Sector

Agriculture accounts for a significant share of economic activity in Kilifi County. More than 30 per cent of the County's economic activity is driven by the agriculture sector. In 2017, agriculture accounted for Ksh 38,319 million out of the total Ksh 119,295 million Gross County Product (GCP) amounting to 32.1 per cent of the County's GCP.

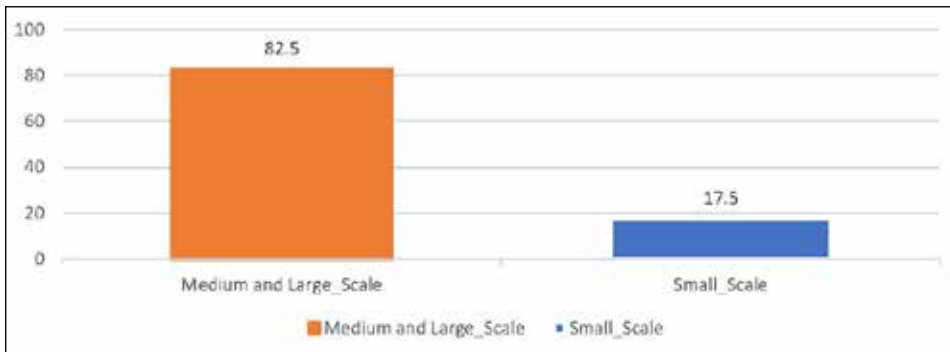
Over 50 per cent of the households in Kilifi County practice farming. 50 per cent of the households produce crops, 34 per cent produce livestock, 0.12 per cent practice aquaculture and about 2.14 per cent are involved in fishing. About 1.9 per cent of the households practice irrigation farming.

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
Kilifi	298,472	161,188	149,334	101,983	366	6,393	5,643
Chonyi	11,421	10,025	9,838	5,153	14	30	68
Ganze	23,258	20,578	19,306	15,777	41	158	442
Kaloleni	36,355	22,504	21,295	14,519	34	54	254
Kauma	3,479	2,867	2,738	1,939	10	60	54
Kilifi North	39,512	18,690	17,085	12,011	30	1,021	386
Kilifi South	53,074	15,114	13,485	8,570	72	878	466
Magarini	33,017	25,989	24,929	15,959	75	1,884	856
Malindi	73,547	31,072	27,424	19,363	63	2,176	2,942
Rabai	24,809	14,349	13,234	8,692	27	132	175

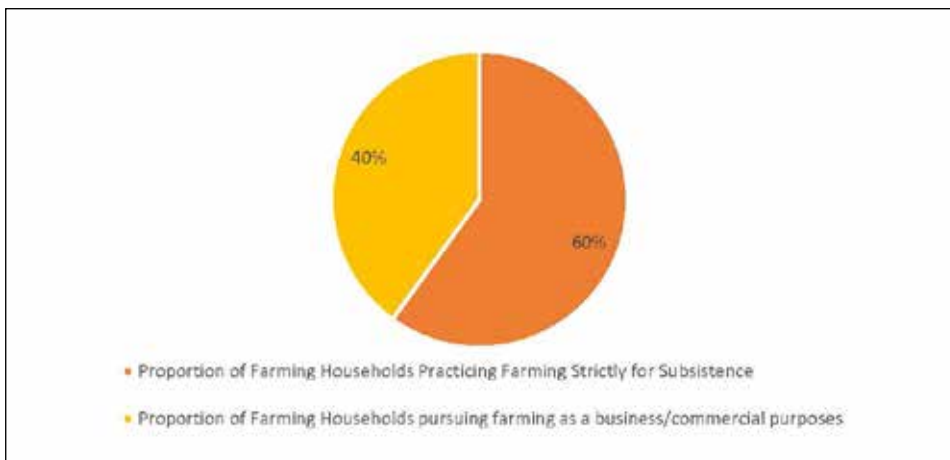
Source: 2019 Kenya Population and Housing Census

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 17.5 per cent of the farming households in Kilifi County practice “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

Majority of the households produce strictly for subsistence purposes, indicating the need for the County to transform the sector shifting production from subsistence to market-oriented output.

Figure 3.2: Characterization of on-farm production

Source: Kilifi County

The County is classified as a Coast – Mixed Staples and Cash agro-ecological zone as per the Agricultural Sector Transformation and Growth Strategy (ASTGS) 2019-2029, with two seasons of moderate rainfall. An overall analysis of the County agricultural production indicates among the top food crops produced by households in Kilifi include maize, cassava, green grams, bananas, beans, sweet potatoes, tomatoes, kales and sugarcane.

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

County/ Sub County	Kilifi	Chonyi	Ganze	Kaloleni	Kauma	Kilifi North	Kilifi South	Maga-rini	Malindi	Rabai
Farming	161,188	10,025	20,578	22,504	2,867	18,690	15,114	25,989	31,072	14,349
Maize	143,913	9,703	18,418	20,458	2,621	16,616	12,930	24,193	26,224	12,750
Cassava	58,225	6,204	7,781	8,810	748	6,199	5,838	5,027	10,146	7,472
Green grams	30,359	3,756	5,055	2,812	387	3,212	3,373	5,405	5,038	1,321
Bananas	26,712	3,146	2,651	4,047	406	2,029	3,440	1,730	4,684	4,579
Beans	10,319	2,196	899	2,051	177	593	1,041	1,326	1,031	1,005
Sweet Potatoes	9,899	461	905	2,078	141	689	688	722	1,598	2,617
Tomatoes	8,854	276	952	1,237	157	1,029	870	1,240	2,502	591
Kales	6,982	199	951	1,448	135	643	544	1,072	1,429	561
Sugarcane	6,383	233	379	798	108	628	733	771	1,635	1,098
Watermelons	4,649	39	1,638	685	66	296	282	593	916	134
Sorghum	2,911	35	1,273	199	41	160	126	614	388	75
Rice	2,847	131	81	1,343	8	79	469	245	184	307
Ground Nuts	2,570	413	161	162	17	430	376	304	605	102
Millet	1,522	41	487	109	7	138	89	289	318	44

Source: 2019 Kenya Population and Housing Census

Key permanent crops among households in Kilifi include coconut, mango and cashew nut.

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

County/Sub County	Citrus	Mango	Coconut	Cashew Nut
Kilifi	6,808	37,519	47,561	27,940
Kenya	177,445	796,867	90,952	61,664

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 Kilifi's value of fruits production in 2019 amounted to Ksh 2.5 billion. The area under fruit was 55,880 Ha with a production of 110,845 MT. The major fruits grown in order of value importance are coconuts, mango, cashew nuts, oranges, banana, pineapples and pawpaw.

Table 3.4: Fruits grown in Kilifi County

Type of Fruit	Area in Ha	Production in Tons	Value in Shillings
Coconuts	28,032	47,390	1,380,753,000
Mango	7,735	38,089	524,634,206
Cashew Nuts	13,802	9,930	231,770,050
Oranges	1,976	4,811	116,168,000
Banana	1,459	3,569	86,183,500
Pineapples	1,031	1,729	47,476,200
Pawpaw	684	1,343	35,888,938
Tangerines	287	1,283	21,912,000
Water Melons	270	1,001	20,546,200
Lemons	239	978	15,931,000
Lime	196	453	7,554,820
Purple Passion Fruits	3	36	1,980,000
Custard Apple	45	188	1,464,320
Yellow Passion	99	27	1,002,000
Grapefruits	22	18	580,000
Total	55,880	110,845	2,493,844,234

Source: Agriculture and Food Authority, 2019

In 2019, the value of vegetables production in the County amounted to Ksh 403.8 million. The area under vegetables was 1,442Ha with a production of 31,547MT. The major vegetables grown in order of value importance are tomato, leaf amaranth, okra, cowpea and egg plant.

Table 3.5: Vegetables grown in Kilifi County

Type of Vegetables	Area in Ha	Production in Tons	Value in Shillings
Tomato	181	2,164	116,917,100
Leaf Amaranth	214	3,054	104,346,458
Okra	297	1,640	48,174,125
Cowpea	301	21,388	45,672,798
Egg Plant	156	1,407	39,710,250
Kales	146	1,235	25,598,500
African Nightshade	69	560	20,323,000
Bell Pepper/Sweet Paper	61	90	2,817,403
Pumpkin Fruit	17	9	200,000
Total	1,442	31,547	403,759,634

Source: Agriculture and Food Authority (2019)

In 2019, the value of MAPs production in the County amounted to Ksh 7.2 million. The area under MAPs was 49 Ha with a production of 937 MT. The major MAPs grown are chillies.

Table 3.6: Medicinal and Aromatic Plants (MAPs) grown in Kilifi County

Medicinal and Aromatic Plants (MAPs)	Area in Ha	Production in Tons	Value in Shillings
Bullet Chillies	8	10	278,360
African birds eye [Abe] chillies	41	927	6,968,752
Total	49	937	7,247,112

Source: Agriculture and Food Authority (2019)

Other than horticultural produce, livestock exports in the County include goat exports. In 2019, the value of goats exported in the County amounted to Ksh 1.8 million.

Table 3.7: Livestock exports

	Goat	
	Quantity (Number)	Value (Ksh million)
2009	300	1.8

Source: Kilifi County

Animal production is also a key economic activity in Kilifi County. Other than rearing the traditional livestock (i.e., cattle, sheep and goats) and fishery activities, 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 3.8: Distribution of households rearing livestock and fish by county and sub-county

County/ Sub County	Kilifi	Chonyi	Ganze	Kaloleni	Kauma	Kilifi North	Kilifi South	Magarini	Malindi	Rabai
Indigenous Chicken	72,134	4,051	12,160	10,405	1,342	8,584	6,215	10,013	12,351	7,013
Goats	67,419	2,585	11,917	9,342	1,499	7,854	4,938	11,620	13,394	4,270
Indigenous cattle	33,420	798	7,307	5,538	812	2,960	1,792	6,065	5,984	2,164
Sheep	6,746	18	2,220	1,357	60	287	177	767	1,531	329
Exotic cattle -Dairy	4,905	148	321	514	37	1,423	558	432	1,206	266
Exotic Chicken Broilers	1,807	10	54	224	19	362	342	189	494	113
Exotic Chicken Layers	1,484	21	199	270	30	194	183	145	315	127
Exotic cattle -Beef	1,480	48	112	166	29	259	157	227	361	121

Donkeys	1,234	1	59	177	2	28	31	628	299	9
Beehives	611	1	98	114	3	39	38	160	120	38
Rabbits	524	15	42	48	6	85	86	54	140	48
Pigs	366	22	3	80	3	37	60	10	24	127
Fish Ponds	333	14	38	31	9	29	67	59	61	25
Camels	81	3	26	4	2	12	4	12	13	5
Fish Cages	50	-	5	5	2	5	8	14	7	4

Source: 2019 Kenya Population and Housing Census

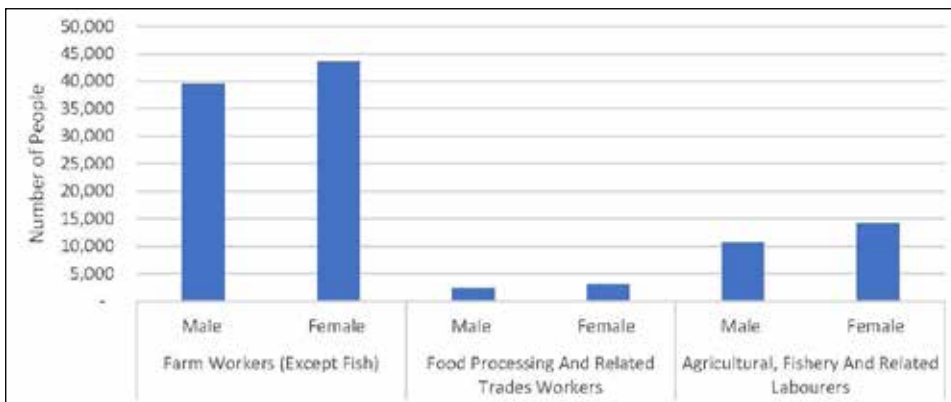
The above characterization of farming households highlights the priority value chain opportunities in maize, cassava, green grams, bananas, beans, sweet potatoes, tomatoes, kales, sugarcane, coconut, mango, cashew nut, cattle, sheep, goats, poultry production, donkey keeping, bee keeping (apiculture) and fisheries. With majority of the households farming the identified products, the current Kilifi transformation strategy in agriculture should prioritize value chains in the identified areas to positively impact of household’s livelihoods.

3.1.1 Agri-Food Challenges in COVID-19

i) Human capital/employment levels – by gender

Agricultural labor participation in Kilifi indicates relative parity between females and males with no strong dominance of either gender in the labor force. Majority of the population in Kilifi are farm workers where the group covers occupations related to: Field Crop, Vegetable and Horticultural Farm Workers; Poultry, Dairy and Livestock Producers; and Crop And Animal Producers. The classifications are based on the Kenya National Occupational Classification Standard (KNOCS).

Figure 3.3: Agriculture related labour force participation

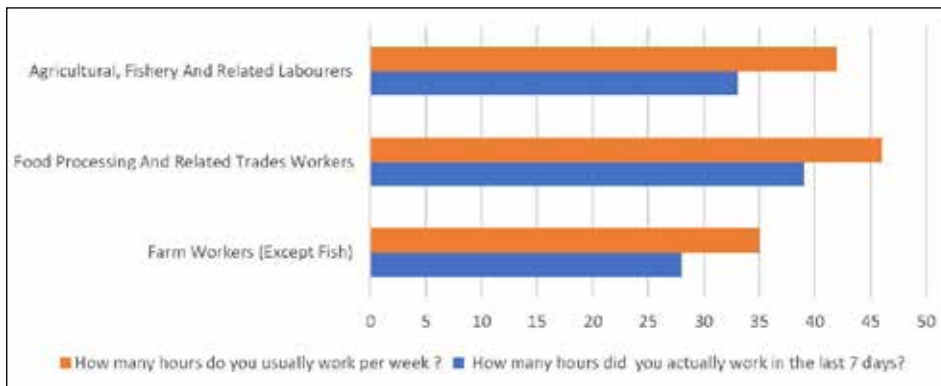


Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

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 agricultural, fishery and related labourers who recorded the highest difference of 9 hours between the usual and actual hours worked in a week. The workers in this sub-major group include Farmhands and Related Labourers; Forestry Labourers; and Fishery, Hunting and Trapping Labourers.

Figure 3.4: 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 Kilifi 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 are long distances to the markets, which minimizes their access. Long market distances are likely to lead to losses emanating from spoilage particularly for fresh agricultural products. A higher proportion of the marketing activity is done through intermediaries.

Table 3.9: Marketing of farm produce in Kilifi County

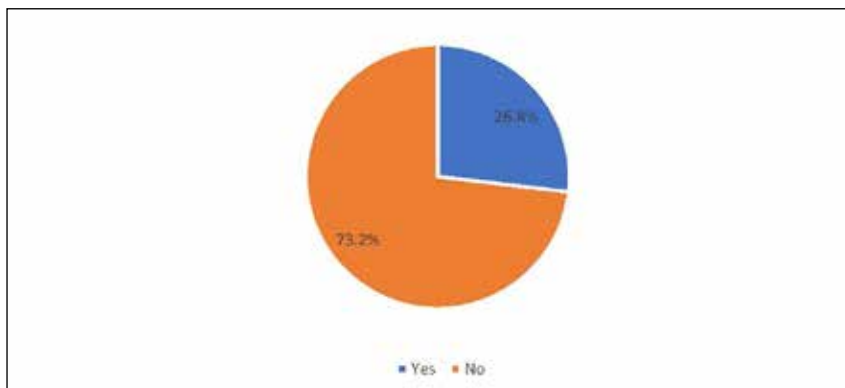
Cereals	Average Distance to Purchase markets (Kms)	05-75km
	Average Purchase lot size (kgs)	25-5000
	Average Storage duration (days)	5
	Average Distance to Sales markets (Kms)	15-85
	Average Sale lot size (kgs)	300-1000
	Sale Transactions carried out through Personal travel (%)	60%
	Sale Transactions carried out through intermediaries (%)	20%
Fresh Produce -vegetables	Average Distance to Purchase markets (Kms)	05-75km
	Average Purchase lot size (kgs)	25-5000
	Average Storage duration (days)	5
	Average Distance to Sales markets (Kms)	15-85
	Average Sale lot size (kgs)	300-1000
	Sale Transactions carried out through Personal travel (%)	60%
	Sale Transactions carried out through intermediaries (%)	20%
Fresh Produce -Fruits	Average Distance to Purchase markets (Kms)	05-75km
	Average Purchase lot size (kgs)	25-5000
	Average Storage duration (days)	5
	Average Distance to Sales markets (Kms)	15-85
	Average Sale lot size (kgs)	300-1000
	Sale Transactions carried out through Personal travel (%)	60%
	Sale Transactions carried out through intermediaries (%)	20%

Source: Kilifi County

Market access problems are further exacerbated by road access, a key indication of access to markets. Kilifi'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 poorly at 35 per cent. This is low compared to the national average of 69.38 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, 26.8 per cent of the households in Kilifi 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

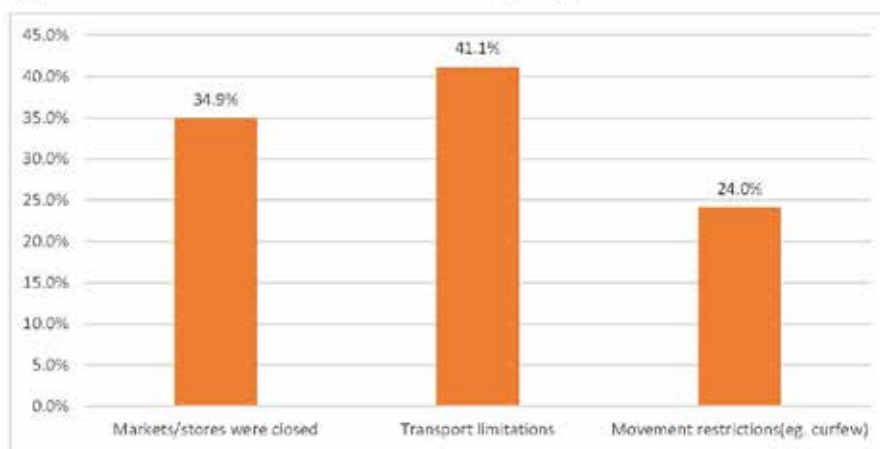
Figure 3.5: Limited access to markets to purchase food items



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 transport limitations (41.1%), closure of the markets/grocery stores (34.9%) and movement restrictions (24.0%).

Figure 3.6: 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. 80 per cent of households in Kilifi County indicated that over the past 2 weeks from the reference period, while 20 per cent indicated that they had not experienced a change in the prices.

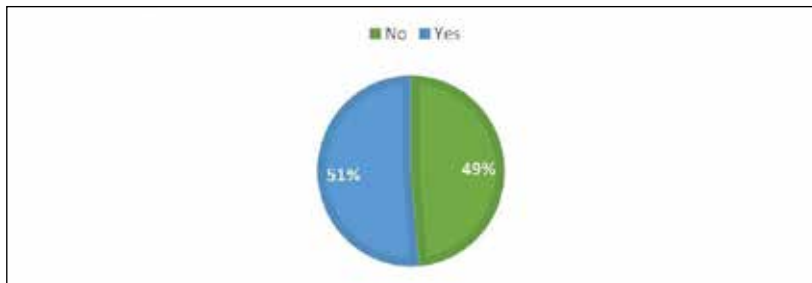
Figure 3.7: Percentage of households experiencing change in food commodity prices



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

On the magnitude of the price shocks, 51 per cent of the households indicated they faced a large rise in food prices in the past two weeks from the reference period.

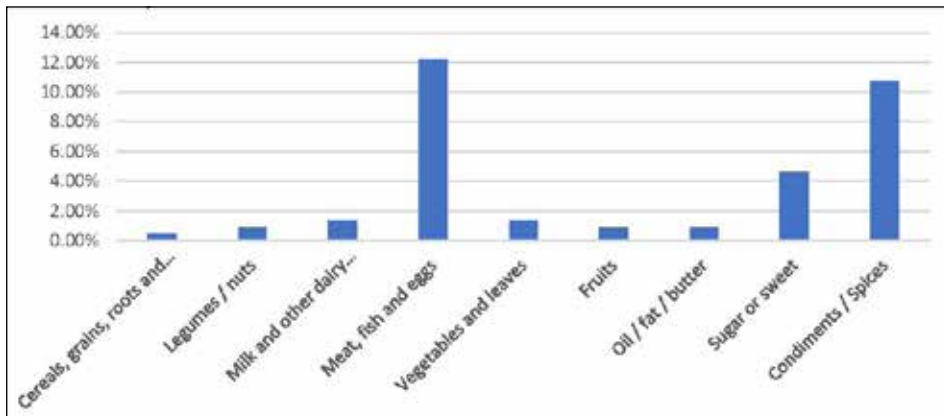
Figure 3.8: Proportion of households facing large food price shocks



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

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

Figure 3.9: Percentage of households reporting that the following food items were not readily available in their locality

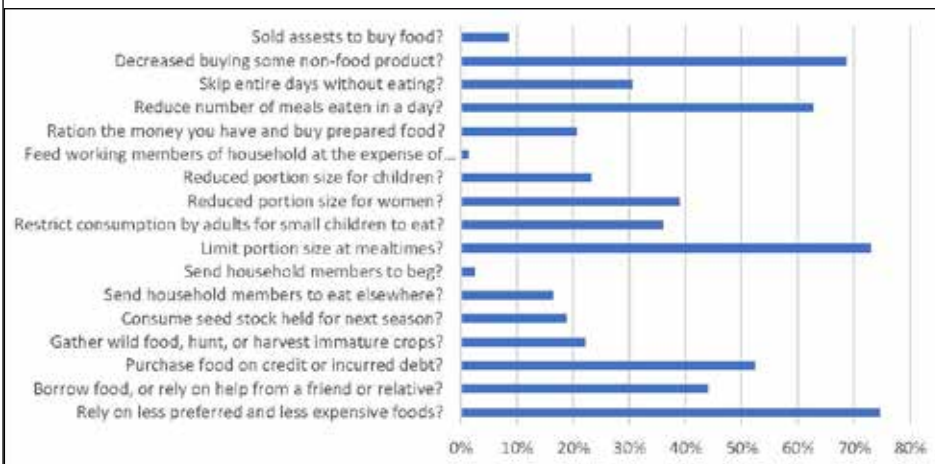


Source: Estimates from the KNBS Survey on Socio-Economic Impact of COVID-19 on

Households-Wave 2

A key concern is that the food group affected most are meat products which are nutritious and necessary for boosting the immune system of the population. Among the key strategies adopted by households to mitigate COVID-19 effects on food consumption include relying on less preferred and less expensive foods (74.6%), limit portion size at mealtimes (73%), decreased buying some non-food products (68.7%), and reduce number of meals eaten in a day (62.7%).

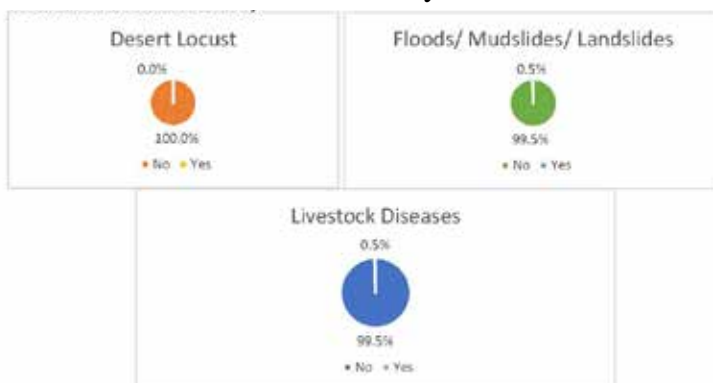
Figure 3.10: % of households where the following strategies were adopted for at least one day



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

Additional challenges faced by the County, albeit at low levels, during the COVID-19 pandemic period include Floods/ Mudslides/ Landslides (0.5%); and Livestock Diseases (0.5%).

Figure 3.11: 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, the Covid pandemic adversely affected fishing in the County.

- i) Most fish products are for exports and with closure of borders and lockdown led to reduced aggregate demand for fish products. The prices for exports reduced for example, Lobsters prices reduced from Ksh 2700 to Ksh 700 per kilogramme.
- ii) The curfew affected the fishing activities where fishermen were forced to either fish early or spend at the sea which was impossible.
- iii) Absorption of fish products in the market was also reduced due to reduced purchasing power.

3.2 Agri-Food Constraints Faced in the County

Among the Key Constraints the County faces include:

- a) Variable and extreme weather events which have increased in frequency and intensity over the years leading to scarcity of pastures and fodder, crop losses, and destruction of fish breeding grounds
- b) Water scarcity affecting crop and livestock productivity
- c) Dependence of rain fed agriculture despite frequency in extreme climate conditions, such as drought episodes and delayed and erratic rains
- d) Low access by farmers to quality and affordable inputs including certified seeds, water, animal feeds, fish feeds, fishing gear, artificial insemination (AI) services, fertilizers, livestock vaccination and mechanized ploughing services by County tractor hire 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) Poor natural resource management leading to environmental degradation and consequently to reduction of water in rivers and wells, reduced soil fertility and deforestation.
- g) Inadequate extension and veterinary services
- h) Slow uptake of digital platforms to market agricultural produce.
- i) Lack of storage and agro-processing capacities leading to farm losses and post-harvest waste.
- j) Farmers low access and capacity to act on early warning bulletins among other climate and weather advisories, as well as limited capacities in pastures rehabilitation and investment in sustainable land management practices.
- k) Limited marketing opportunities for improved incomes
- l) Low commercialization of farming where majority of farmers practice farming for subsistence purposes and as cultural practices rather than a business.
- m) Poor access to agricultural finance, to include credit and insurance.

- n) Low adaptive capacities of farmers to Climate change
- o) Inadequate extension and veterinary services
- p) Pests and Diseases
- q) Farm losses and post-harvest waste.

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

3.3 Opportunities with COVID-19 in Agriculture sector

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

- i. 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 food services
- ii. 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:

- i. Developing County-private partnership in enhancing agro-processing and value addition and Linking farmers to product markets
- ii. Access to quality, certified, and affordable inputs including certified seedlings, fish feeds, fishing gear, AI services, fertilizers, livestock vaccination, ploughing services by County tractor hire services.
- iii. Enhance deep-sea fishing through financial and technical capacity building of fishers on cage culture and fish value addition.
- iv. Enhance fish production through: - investment in fish cold storage facilities; building farmers capacities in cage farming and value addition
- v. Increased international trade in fish, livestock and livestock products
- vi. Adoption of drought resistant livestock pastures/fodder and crops
- vii. Adoption of early maturing, drought resistant and improved crop varieties
- viii. Rearing livestock breeds adapted to drought
- ix. Strengthening water harvesting, sustainable and efficient irrigation.
- x. 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; and provision of mechanized equipment.

- xi. Investment in cooling and storage facilities to reduce post-harvest losses
- xii. Adoption of natural resource management to include soil and water conservation, tree planting, and changing of crop type.
- xiii. Enhance supportive services to include early-warning systems, insurance and credit, extension advisory and information services through extension and training.
- xiv. Enhancing farmers technical capacities to act on advisory information received
- xv. Improved crop and livestock emergencies surveillance systems in the County.
- xvi. Strengthening farmers' associations and cooperatives as an additional solution to marketing challenges

3.4 Emerging Issues

- i) Environmental degradation has reduced productive capacity of farms leading to increased risks to food insecurity and reduced farmers income.
- ii) Climate change, manifested in increased frequency and intensity of extreme weather conditions such as floods, droughts and pest invasion.

3.5 Recommendations

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

- i) Develop partnership with the National Government, NGOs, Development Partners, Research Institutions and the Private sector in enhancing agro-processing and value addition capacities of the County particularly in meat, leather and honey processing plants and construction of abattoirs.
- ii) Investments in storage and cooling facilities to minimize spoilage and post-harvest losses.
- iii) Invest in access roads to enhance linkage between farms and markets. Kilifi's rural access index (RAI) fairs poorly at 35 per cent compared to the national average of 69.4 per cent. Extensive rural road infrastructure plays a central role in provision of affordable access to both markets for agricultural outputs and modern inputs. Other crucial market infrastructure includes lighting and water services to facilitate trade activities.
- iv) Boost fisheries and aquaculture by investing in suitability mapping; infrastructure development; availing affordable and sustainable fish feeds; diversification and domestication of fish species; and investment in hatcheries for good quality seed.

- v) Digitize the agri-food sector to support: training and building capacities of farming households in modern agricultural technologies, provision of advisory and information services, marketing agricultural produce at a wider scope beyond the County level and improving access to innovative support services including credit and insurance services.
- vi) Enhance farmers access to quality and affordable inputs including climate resistance livestock breeds, certified seeds, water, animal feeds, AI services, fertilizers, livestock vaccination and ploughing services by County tractor hire services.
- vii) Establish programmes for surveillance of disasters such as extreme weather conditions, crop pest and diseases, and livestock disease at the County level equipped with relevant technical specialists and finances to effectively prepare, respond and prevent risks.
- viii) Establish County multisectoral committees to deal with cross-cutting issues such as marketing of agricultural produce that cuts across the trade, ICT and infrastructure sectors that provide crucial market infrastructure such as road infrastructure, lighting and water services.
- ix) Build capacity for farmers in produce handling/ output/ improved product standards, adoption of modern farming technologies (e.g. water harvesting techniques, fodder establishments) and practices and adopt sustainable land management practices to minimize environmental degradation.
- x) Invest in sustainable irrigation and water harvesting technologies to sustain farming by developing irrigation infrastructure and technologies in the County.
- xi) 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

The main resources of water for households in the county are rivers, ocean, shallow wells, springs, water pans, dams and water from dug wells. Despite the county being surrounded by plenty of water sources and the ocean, the households still face problem with access to safe and clean water for drinking.

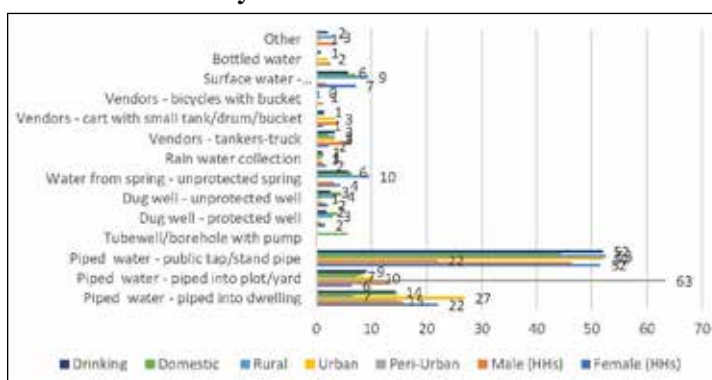
Measure to mitigate the effect of COVID-19 under water and sanitation

- The county had focused on rehabilitating water and sanitation projects which includes drilling of boreholes and repair of water pipelines and tanks.
- The county envisages to implement projects where water and sanitation has not been strongly provided
- Water is received from Baricho and the water sources is being shared with Mombasa county. The county is partnering with private sector to ensure that this is achieved.

Access to source of water by households

The major source of water for drinking utilized by households in the county is piped water (public tap/standpipe) (52%), piped water into dwelling (14.3%) and piped water into plot/yard (9.1%). Households in rural areas (15.5%) and urban (52.5%) have access to piped water (public tap/standpipe) (51.5%). Peri-urban households rely on piped water into plot/yard (63.4%), piped water (public tap/standpipe) (22%) and piped water into dwelling (14.6%). See the figure below.

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.

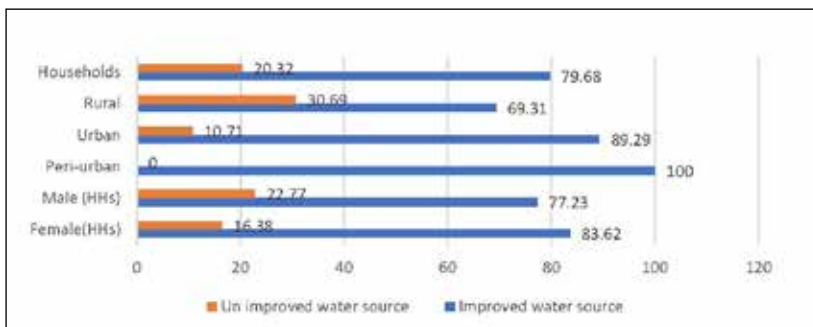
To ensure continuity of quality water supply, there is need for the county to invest in water harvesting and storage facilities both at household and institutional level, this may include supporting schools in building rain harvesting and storage structures in schools from the school structure rooftops, 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)

Access to improved drinking water is high in the county among households (79.7%), rural (69.3%), urban (89.3%) and peri-urban (100%). Similarly, both male and female headed households have high access to improved drinking water source of water as shown in the figure below. Gender access to clean water is an important consideration in provision of water to households, women and girls, poor households, informal settlements, persons with disabilities, marginalized groups and minorities do experience challenges in access to water. Clean and safe water is essential for good health and goes a long way in ensuring reduced infections.

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



Source: KNBS 2015/2016

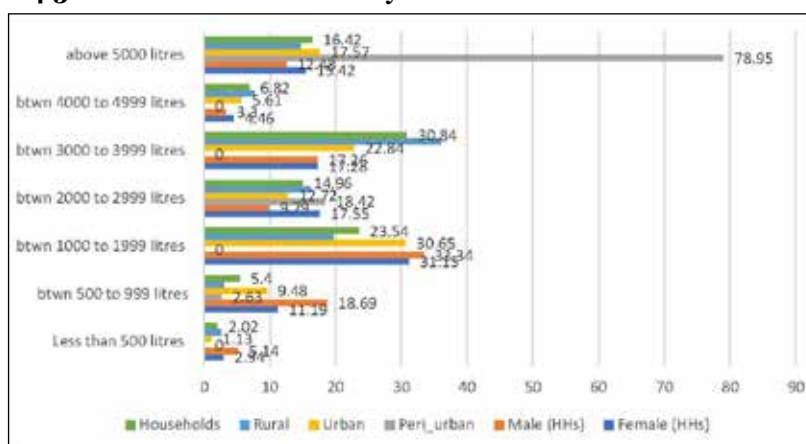
Inequalities in access to safe and clean drinking water may put households at risk of contracting infectious diseases as well as make the households less observance of COVID-19 measures of hand hygiene. One mitigation measure that may be undertaken by the county to increase access to improved water source, 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 (30.9%), rural (36.1%), urban (22.8%) use between 3000 to 3999 litres of water in a month. On the other hand, most of peri-urban (79.0%) of households use above 5000 litres of water in past one month. Additionally, majority of male (33.3%) and female (31.2%) headed households use between 1000-1999 litres of water in a month.

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

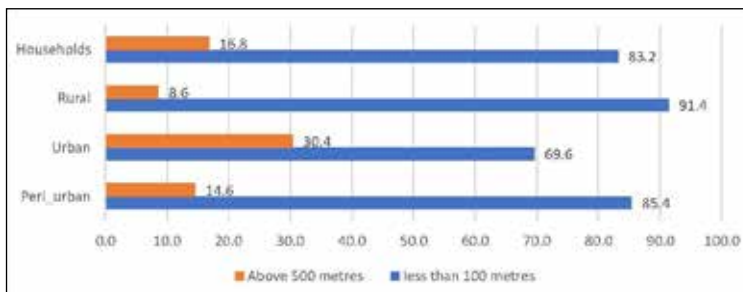


Source: KNBS 2015/2016

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

Majority of the households (83.2%) both rural, urban, and peri-urban covers less than 100 metres to water sources, meaning they have water within their premises or close to their compounds. Only a small portion of households covers more than 500 metres to water sources at 16.84 per cent.

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



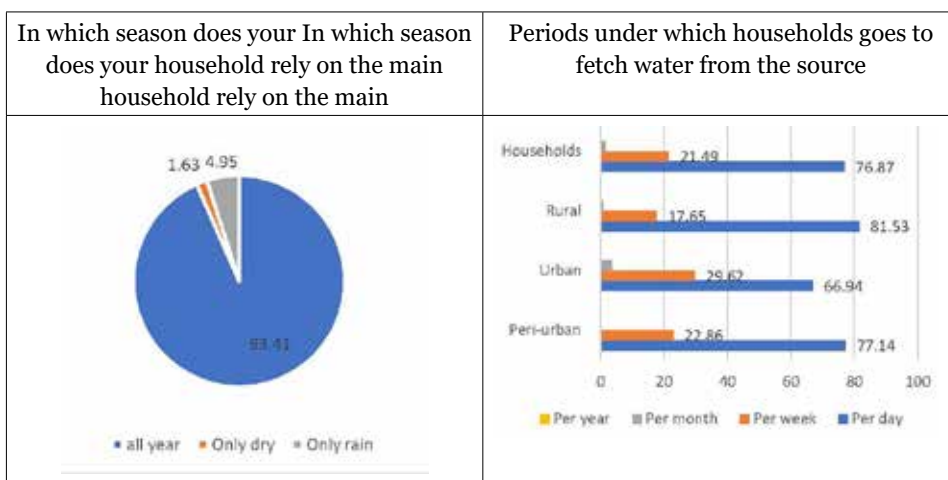
Source: KNBS 2015/2016

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 (93.4%) in the county rely on the main source of drink water all year round therefore in case of the source drying up, households will lack water resulting into non observance of COVID-19 measures of hand washing. On the other hand, most households must go to fetch drinking water from the sources per day at 76.9 per cent, rural households at 81.5 per cent and urban households at 66.9 per cent. This 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



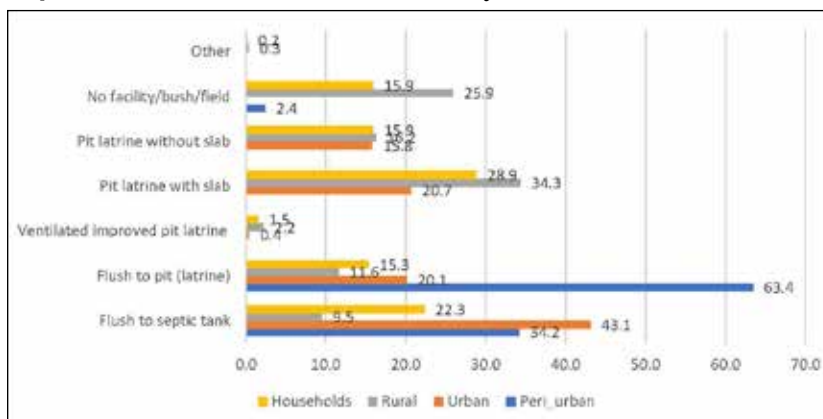
Source: KNBS 2015/2016

Source: KNBS 2015/2016

Access to sanitation

The commonly used sanitation facilities by households (28.9%) as well as rural households (34.3%) is pit latrine with slab. Additionally, most urban households (43.1%) flush to septic tank, while peri-urban (63.8%) flush to pit latrine.

Figure 4.6: Access to sanitation in the county

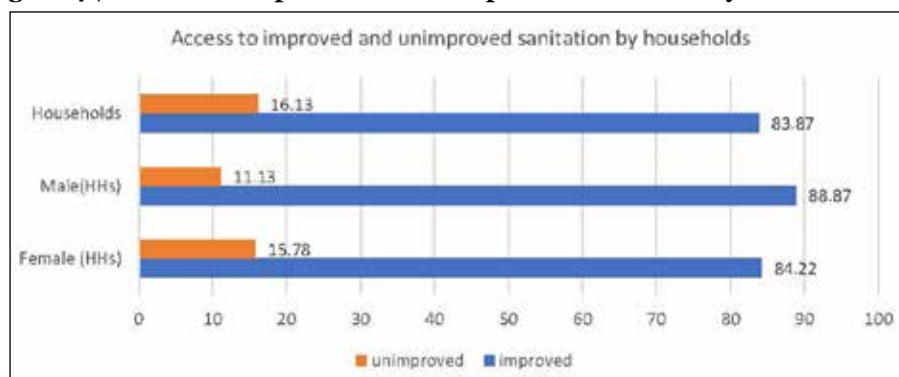


Source: KNBS 2015/2016

Access to improved and unimproved sanitation

Majority of the households (83.9%) as well as male (88.9%) female (84.2%) headed households have a high access to improved sanitation as shown in the figure below. 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.

Figure 4.7: Access to improved and unimproved sanitation by households



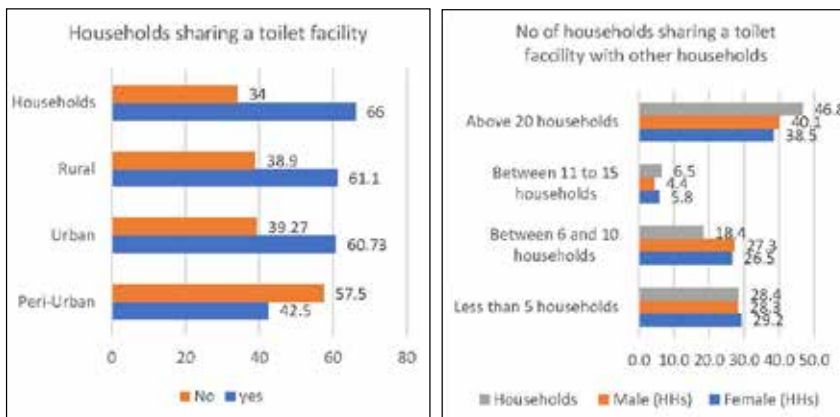
Source: KNBS 2015/2016

Sharing of a toilet facility

Additionally, most of the households (66%), and rural (61.1%) and urban households (60.7%) do share a toilet facility with other households. There are large proportions of

households (46.8%), male (40.1%), and female (38.5%) 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 28.4 per cent.

Figure 4.8: Number of households sharing a toilet facility



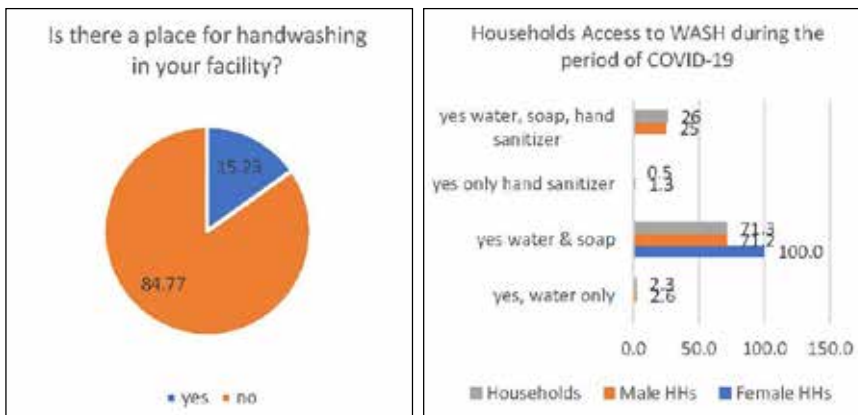
Source: KNBS 2015/2016

Source: KNBS 2015/2016

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 of the households (84.8%) in the county do not have a handwashing facility in their households. On the other hand, of the households (71.3%) have access to WASH (Water and soap) during this period of COVID-19, male headed households at 71.2 per cent and female headed households at 100 per cent. Additional 26.02 per cent of the households having access to both water, soap and hand sanitizer, male headed households 24.9 per cent Only a small portion of households have access to water only at 0.5 per cent.

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

4.3 Emerging Issues

The County has provided wash taps within shops in the town center as well as handwashing facilities in County and sub-County offices. The county has undertaken a distribution of water tanks, water and soaps at points of entry as well as developed hand washing booths in the informal settlements. The booths are made by students from the TVET institutions

4.4 Recommendations

The recovery strategy recommends the following strategies for implementation:

- i) 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 sanitation² 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 should 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 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

² 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

5. Manufacturing, Trade and MSMEs

5.1 Characteristic of the Sector

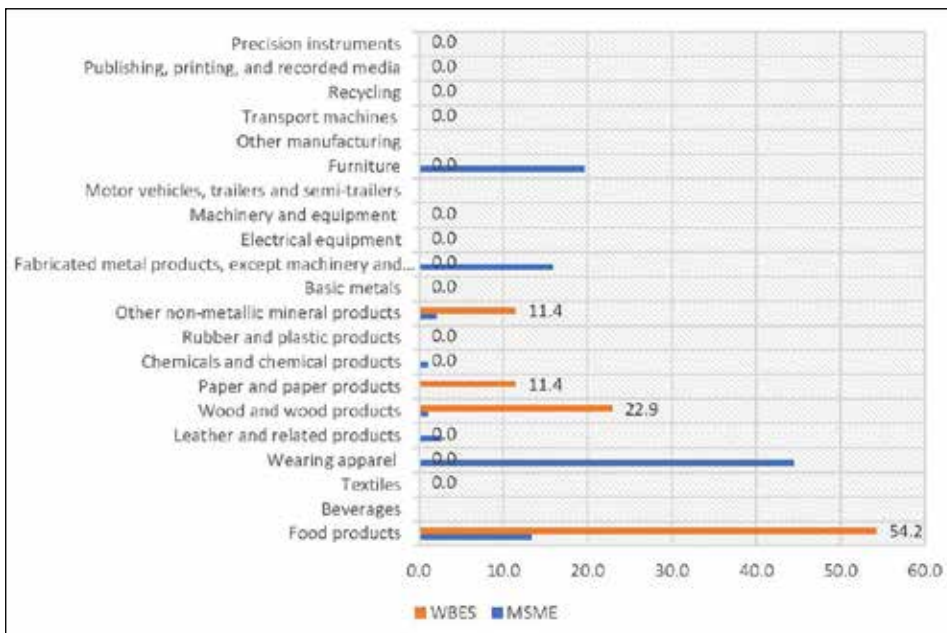
a) *Manufacturing sector*

Kilifi County has 4,617 establishments involved in manufacturing activities which comprise of 12.7 per cent of a total of 36,226 firms (KNBS, 2016). In terms of size 4,358 (94.4%) are micro, 167 (3.6%) are small, and 92 (2.0%) are medium enterprises.

Sector of operation

According to the KNBS, 2016 survey, the key sub-sectors that drive manufacturing include: wearing apparel (44.5%), furniture (19.6%), fabricated metal products, except machinery and equipment (15.8%), and leather and related products (2.7%) (Figure 5.1). The World Bank enterprise survey (WBES) of 2019 compliments these findings and provides additional evidence on the sub-sectors key to manufacturing (Figure 5.1). They include food products (54.2%), wood and wood products (22.9%), paper and paper products (11.4%), and other non-metallic mineral products (11.4%). 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 coconut, mango, cassava, cotton, sisal, cashew nuts, fish, leather, textiles, livestock, dairy, craft, iron ore, manganese, cement, coral rock harvesting, quarrying, ballast, salt and sand harvesting. The industries and factories driving manufacturing sector in the County are involved in fish processing, pineapple, mango processing, citrus fruits and coconut processing.

Figure 5.1: Sector of operation in manufacturing

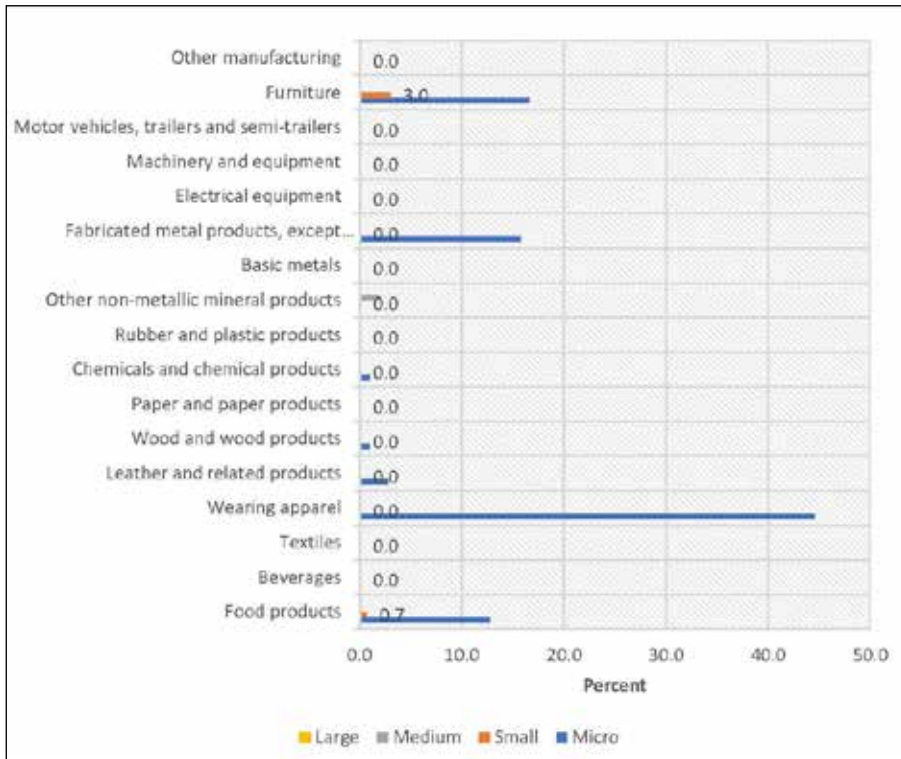


Source: KNBS (2016) and WBES (2019)

Sector of operation by size

Majority of the establishments in Kilifi County are micro in nature and operate in the wearing apparel (44.5%), furniture (16.6%), fabricated metal products except machinery and equipment (15.8%), and food products (12.7%) (Figure 5.2). Small sized establishments operate in furniture (3.0%) and food products (0.7%).

Figure 5.2: Manufacturing firms by sector and size

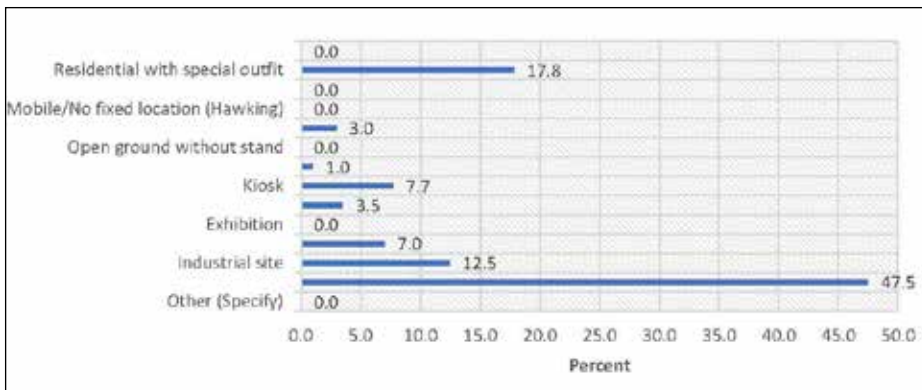


Source: KNBS (2016)

Location of manufacturing firms by type of premises

Common premises used by manufacturing firms in Kilifi County are commercial (47.5%), residential with special outfit (17.8%), industrial site (12.5%), kiosk (7.7%), and market stall (7%) (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 Kilifi County are dominantly owned by male (46.1%), with females comprising 34.6 per cent while 19.3 per cent are jointly owned. In terms of micro-sized firms, 42.9 per cent are male owned, 36.7 per cent female owned and 20.4 per cent jointly owned. Small sized firms are largely male owned (100%) (Table 5.1).

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

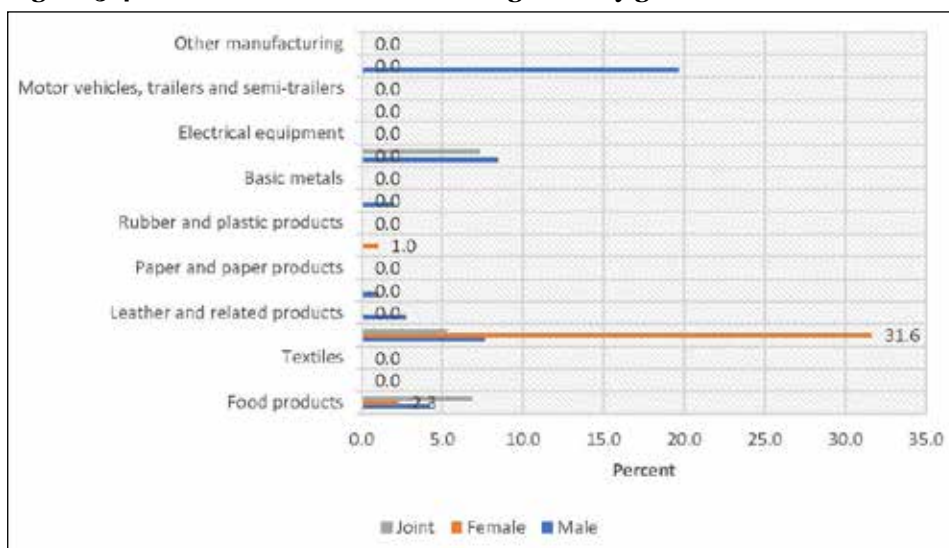
Gender	A11	Micro	Small	Medium
Male	2,127 (46.1)	1,868 (42.9)	167 (100)	92 (100)
Female	1,599 (34.6)	1,599 (36.7)	0 (0)	0 (0)
Joint	891 (19.3)	891 (20.4)	0 (0)	0 (0)
Total	4,617 (100)	7,829 (100)	167 (100)	92 (100)

Source: KNBS (2016)

Distribution of Manufacturing firms by gender and sector

Majority of the sub-sectors in manufacturing are male dominated including furniture (19.6%), fabricated metal products except machinery and equipment (8.4%) and wearing apparel (7.6%). Females are mostly found in the wearing apparel (31.6%), food products (2.3%), and chemical and chemical products (1.0%) (Figure 5.4).

Figure 5.4: Distribution of manufacturing firms by gender and sector



Source: KNBS (2016)

In terms of employment, the manufacturing sector in the County employs more men (78.1%) than women (21.9%). Most men are found in the micro-sized enterprises (32.4%) while 23.2 per cent and 22.5 per cent are in small-sized and medium-sized establishments. Majority of the women are predominantly in the micro enterprises (21.1%) (Table 5.2).

Table 5.2: Employment by gender and size for manufacturing firms

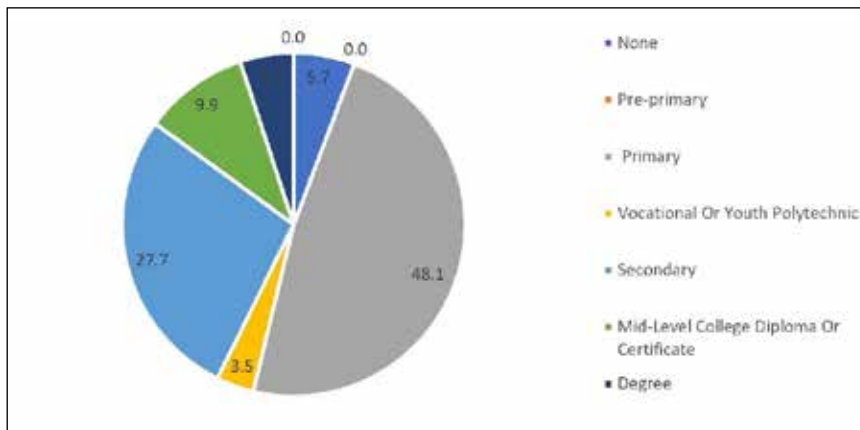
Number of employees	Micro	Small	Medium	Total
Male	7,771 (32.4)	5,573 (23.2)	5,412 (22.5)	18,756 (78.1)
Female	5,062 (21.1)	0 (0)	183 (0.8)	5,245 (21.9)
Total	12,833 (53.5)	5,573 (23.2)	5,595 (23.3)	24,001 (100)

Source: KNBS, 2016

Education levels of manufacturing firm owners

Education levels of manufacturing firm owners as shown in figure 5.5 as follows: primary (48.1%), secondary (27.7%), mid-level college diploma or certificate (9.9%), and vocational or youth polytechnic (3.5%). About 5.7 per cent of manufacturing firm owners do not have any form of formal education.

Figure 5.5: Education levels of manufacturing firm owners

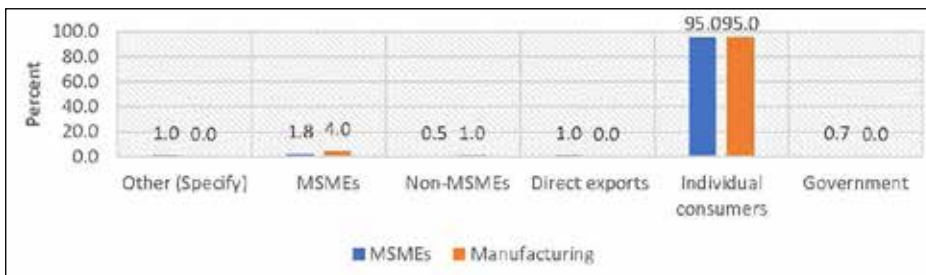


Source: KNBS (2016)

Source of markets

Majority of manufacturing establishments and MSMEs in general rely on individual consumers for markets both at 95 per cent (Figure 5.6). MSMEs and non-MSMEs are also important sources of markets for the sectors.

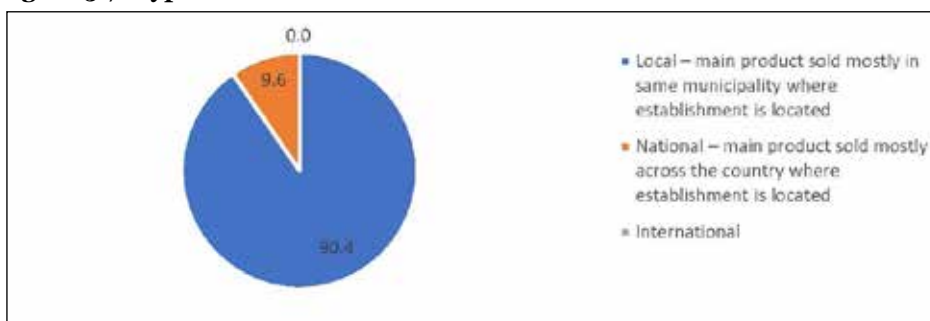
Figure 5.6: Source of markets



Source: KNBS (2016)

In addition, MSMEs rely on external source of markets at 1 per cent. However, firms in manufacturing do not depend on international markets. This is echoed by the WBES, 2019 where no manufacturing firms source for markets internationally (Figure 5.7).

Figure 5.7: Type of markets

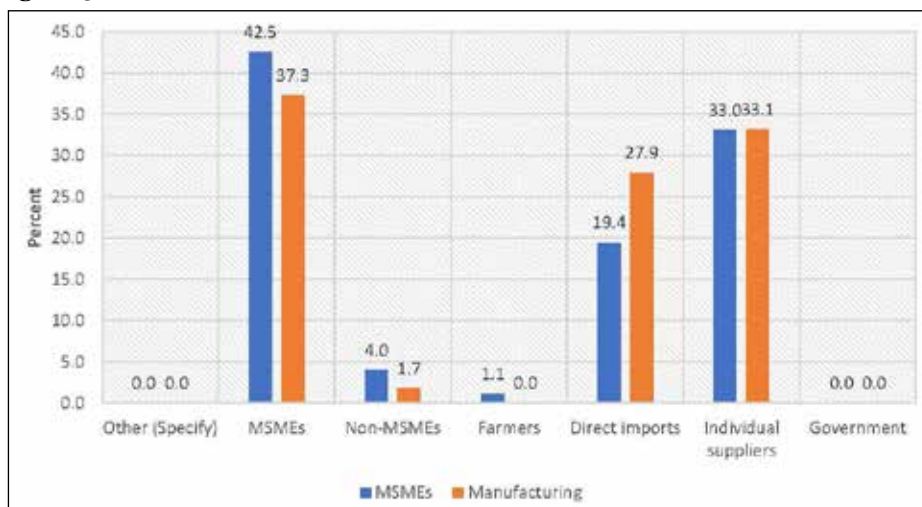


Source: WBES (2019)

Source of material inputs

Overall, manufacturing establishments and MSMEs source for material inputs from amongst MSMEs at 37.3 per cent and 42.5 per cent respectively (Figure 5.8). Individual suppliers, farmers, as well as non-MSMEs are also important to the supply of inputs. Manufacturing firms and MSMEs also source for inputs from direct imports at 27.9 per cent and 19.4 per cent respectively. Hence disruptions in the external source markets have adverse implications to both firms in manufacturing and MSME operations in Kilifi County.

Figure 5.8: Source of raw materials



Source: KNBS (2016)

Level of innovation by firms in Manufacturing

Manufacturing establishments in Kilifi County were involved in both product, process and market innovations. More product innovations are seen under the micro category at 2.7 per cent and process (4.7%). In addition, product innovations are found at medium enterprises (2%), process (2%), and market (2%). There is hardly any form of innovations found at the small category (Table 5.3).

Table 5.3: Level of innovation by firms in manufacturing

Type of innovation	Micro			Small		Medium		Total
	Don't know	No	Yes	No	Yes	No	Yes	
Product	0 (0)	4,158 (91.6)	120 (2.7)	167 (3.7)	0 (0)	0 (0)	92 (2)	4,538 (100)
Process	0 (0)	4,067 (89.6)	212 (4.7)	167 (3.7)	0 (0)	0 (0)	92 (2)	4,538 (100)
Market	0 (0)	4,279 (94.3)	0 (0)	167 (3.7)	0 (0)	0 (0)	92 (2)	4,538 (100)

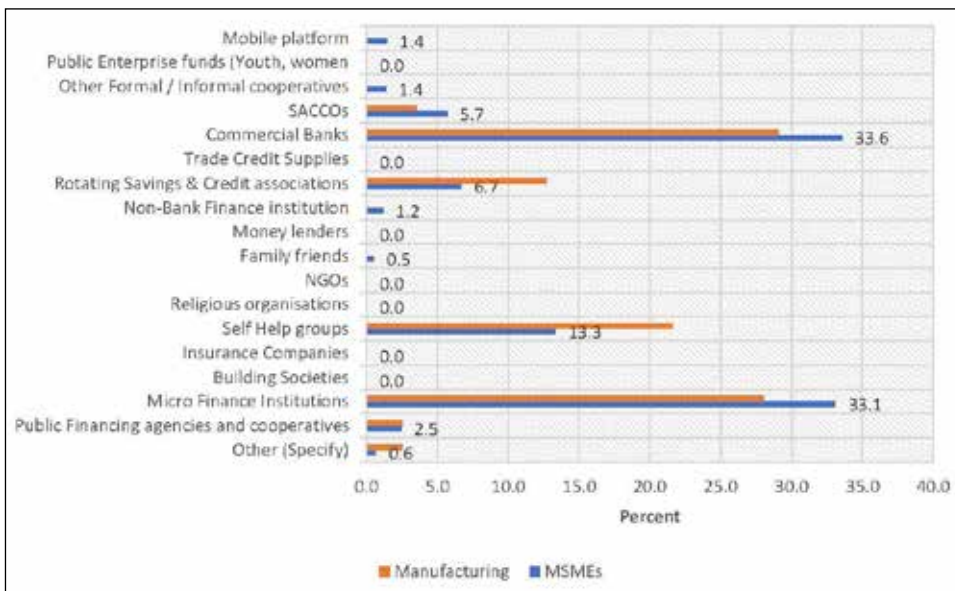
Source: KNBS, 2016

Access to credit for Manufacturing and MSMEs firms

According to the MSME 2016 survey, 68.7 per cent of MSMEs and 63.8 per cent of those in manufacturing applied for credit. The main sources of credit for establishments in manufacturing include commercial banks (29.1%), MFIs (28.0%), self help groups (21.6%), rotating savings and credit associations (12.7%), SACCOs (3.6%), public financing agencies

and cooperatives (2.5%), among others. MSMEs largely rely on commercial banks (33.6%), micro finance institutions (33.1%),self help groups (13.3%), rotating savings and credit associations (6.7%), and SACCOs (5.7%) (Figure 5.9).

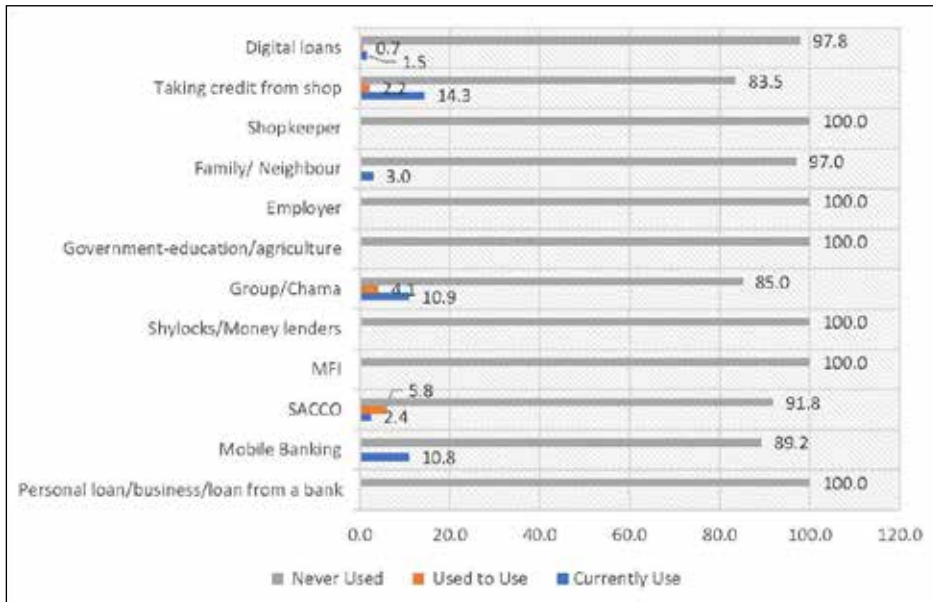
Figure 5.9: Sources of finance



Source: KNBS (2016)

Recent evidence from FinAccess 2019 provides further insights on sources of credit for businesses in Kilifi County. Businesses commonly obtain credit from the conventional sources such as shops (14.3%), groups/chama (10.9%), family/neighbour (3.0%), and SACCOs (2.4%). Emerging sources of credit for businesses in Kilifi County include mobile money (10.8%) and digital loans (1.5%) (Figure 5.10).

Figure 5.10: Recent sources of credit

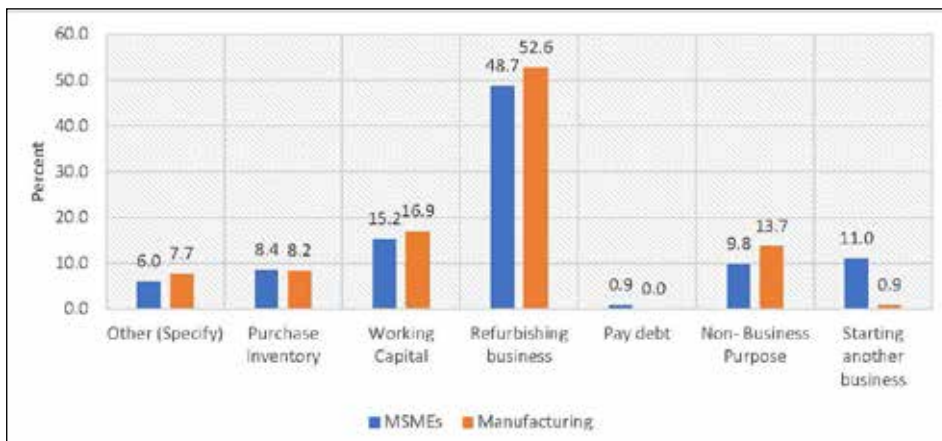


Source: FinAccess (2019)

Purpose of credit

Figure 5.11 presents the main purpose of credit by both MSMEs and establishments in manufacturing. Broadly, manufacturing firms require credit for: business refurbishment (52.6%), working capital (16.9%), purchase inventory (8.2%), and non-business purposes (13.7%). MSMEs in Kilifi County require credit for business refurbishment (48.7%), working capital (15.2%), and non-business purposes (9.8%).

Figure 5.11: Main purpose of credit

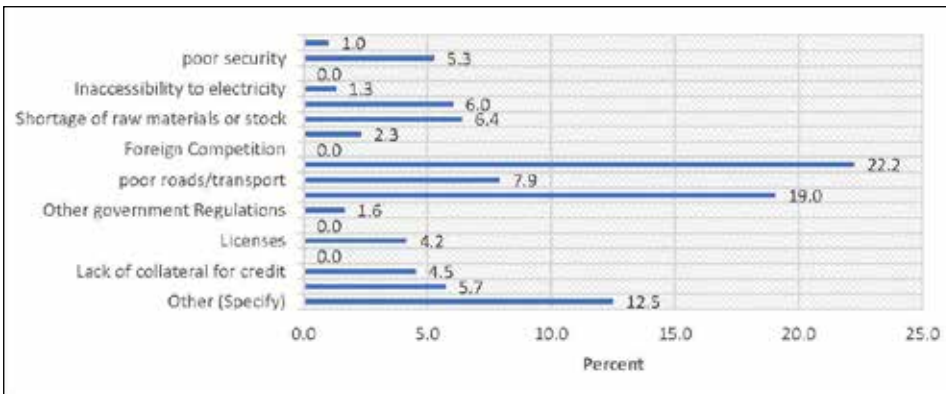


Source: KNBS (2016)

Constraints faced by manufacturing firms

The main constraints faced by firms in manufacturing include local competition (22.2%), lack of markets (19.5%), poor roads/transport (7.9%), shortage of raw materials or stock (6.4%), power interruption (6.0%), and poor security (5.3%) (Figure 5.12).

Figure 5.12: Constraints faced by manufacturing firms

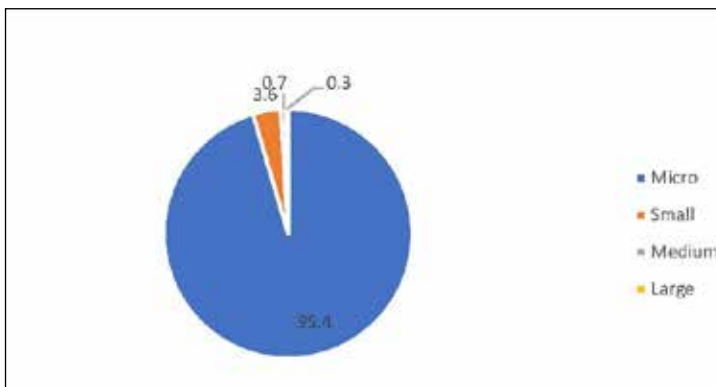


Source: KNBS (2016)

b) Micro, Small and Medium Enterprises (MSMEs)

Kilifi County has 36,226 establishments³ with 34,576 (95.4%) being micro, 1,307 (3.6%) are small, 249 (0.7%) are medium and 93 (0.3%) are large enterprises (KNBS, 2016) (Figure 5.13).

Figure 5.13: Distribution of MSMEs by size



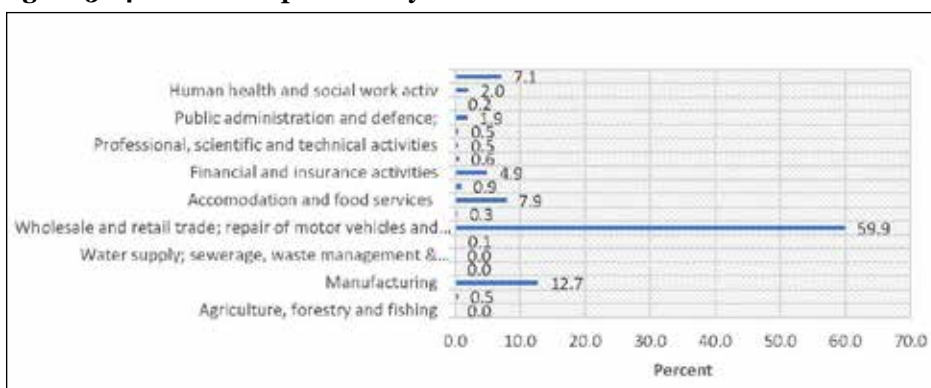
Source: KNBS (2016)

3 After applying weights

Sector of operation by MSMEs

Majority of MSMEs in Kilifi County operate in the wholesale and retail trade; repair of motor vehicles and motorcycles (59.9%), manufacturing (12.7%), arts, entertainment and recreation (7.1%), and accommodation and food services (7.9%) (Figure 5.14). Ideally, these are the sectors that have been affected most by the pandemic and need focus in achieving re-engineering and recovery.

Figure 5.14: Sector of operation by MSMEs

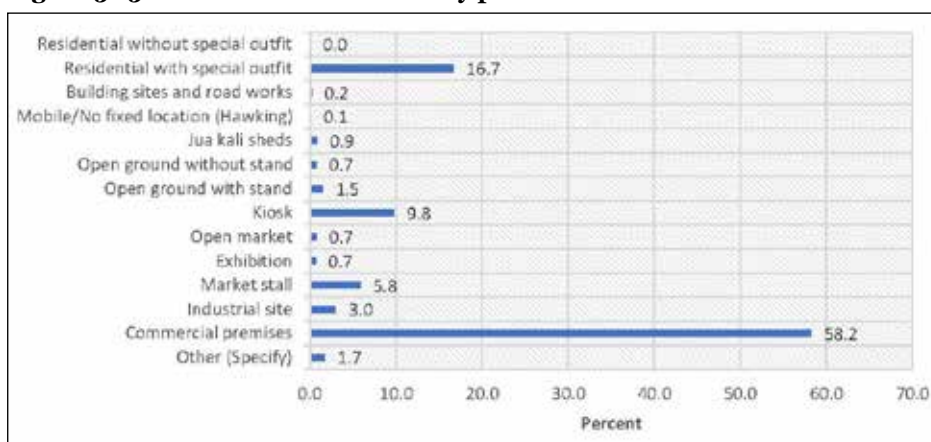


Source: KNBS (2016)

Location of the businesses by type of premises

MSMEs in Kilifi County are largely located in commercial premises (58.2%), residential with special outfit (16.7%), kiosk (9.8%), market stalls (5.8%), and industrial site (3%) (Figure 5.15).

Figure 5.15: Location of businesses by premises



Source: KNBS (2016)

Majority of the businesses in the county faced a lot of difficulties in meeting their rental obligations due income disruptions occasioned by COVID-19. The May 2020 KNBS

COVID_19 Survey shows that all respondents from non-farm businesses attributed non-payment of rent obligations to reduced incomes/earnings. For those involved in farm businesses, 55.9 per cent attributed the same to reduced incomes/earnings while 44.1 per cent were affected by delayed incomes/earnings.

Distribution of MSMEs by gender and size

Table 5.4 shows the distribution of MSMEs in Kilifi County by gender: 45.4 per cent are male owned, 29.5 per cent are female owned, while 25 per cent are jointly owned (male/female). For Micro establishments, 44.6 per cent are male owned, 30.8 per cent are female owned, while 24.6 per cent are jointly owned. Male owners also dominate ownership among small sized establishments at 62.5 per cent, females own 5.1 per cent, and 32.4 per cent are jointly owned. Considering large sized establishments, ownership is fully controlled by males (100%).

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

Gender	A11	Micro	Small	Medium	Large
Male	16,457 (45.4)	15,435 (44.6)	817 (62.5)	171 (68.4)	35 (100)
Female	10,703 (29.5)	10,636 (30.8)	67 (5.1)	0 (0)	0 (0)
Joint	9,065 (25)	8,505 (24.6)	423 (32.4)	79 (31.6)	0 (0)
Total	36,226 (100)	34,576 (100)	1,307 (100)	249 (100)	35 (100)

Source: KNBS (2016)

In terms of employment, the micro sized establishments employ more people (58.2%) compared to small (16.7%), medium (3.6%) and large (12.8%) (table 5.5). Micro firms employ 33.8 per cent male and 24.5 per cent female and small sized employ 12.7 per cent male and 4 per cent female. Equally, more men are employed among medium and large establishments at 9.1 per cent and 11.1 per cent while females include 3.2 per cent and 1.7 per cent respectively. Overall, more men (66.6%) are employed by MSMEs in Kilifi County than women (33.4%).

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

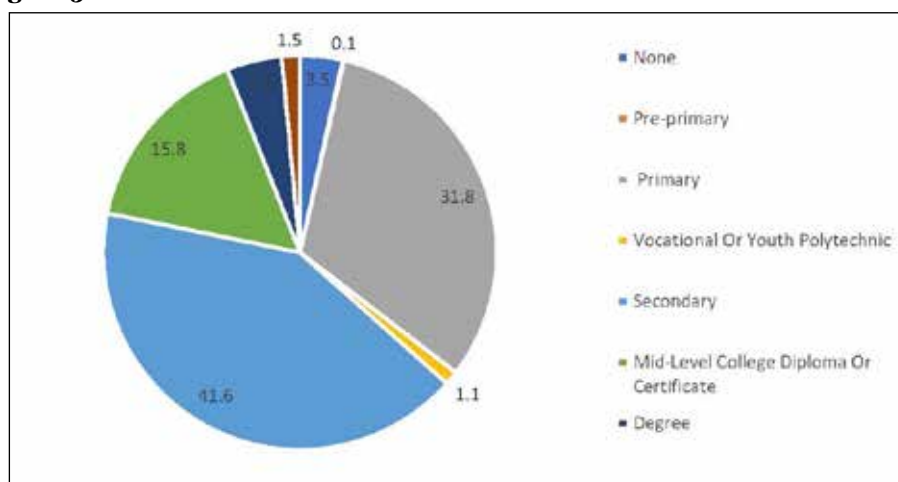
Gender	Micro	Small	Medium	Large	Total
Male	48,057 (33.8)	18,116 (12.7)	12,904 (9.1)	15,778 (11.1)	94,856 (66.6)
Female	34,818 (24.5)	5,629 (4)	4,600 (3.2)	2,468 (1.7)	2,468 (33.4)
Total	82,875 (58.2)	23,746 (16.7)	17,503 (3.6)	18,246 (12.8)	142,371 (100)

Source: KNBS (2016)

Education levels of MSME owners

Education levels of MSME owners are depicted in figure 5.16 as follows: secondary (41.6%), primary (31.8%), mid-level college diploma or certificate (15.8%), and degree (4.5%). About 3.5 per cent of MSME owners in Kilifi County do not have any form of formal education.

Figure 5.16: Education levels of MSME owners



Source: KNBS (2016)

Level of innovation by MSMEs

Table 5.6 presents the levels of innovation in Kilifi County by MSMEs according to size. Overall, there were low levels of innovation across MSMEs with 5.7 per cent involved in product, 2 per cent for process, and 2.1 per cent in market innovation for micro-sized enterprises. Regarding small-sized enterprises, 0.3 per cent engaged in product, 0.3 per cent process and 0.4 per cent market innovation. With regards to medium sized enterprises, all (0.7%) were involved in product, process and market innovations, while for large enterprises, only 0.1 per cent were involved in product innovations respectively.

Table 5.6: Level of innovation by MSMEs

Type of Innovation	Micro				Small				Medium		Large			Total
	Refused to answer	Don't know	No	Yes	Refused to answer	Don't know	No	Yes	No	Yes	Don't know	No	Yes	
Product	0 (0)	0 (0)	32,247 (90)	2,045 (5.7)	0 (0)	35 (0.1)	1,136 (3.2)	102 (0.3)	0 (0)	249 (0.7)		58 (0.2)	35 (0.1)	35,814 (100)
Process	0 (0)	0 (0)	33,561 (93.7)	731 (2)	0 (0)	35 (0.1)	1,136 (3.2)	102 (0.3)	0 (0)	249 (0.7)	0 (0)	93 (0.3)	0 (0)	35,814 (100)
Market	0 (0)	0 (0)	33,557 (93.7)	735 (2.1)	0 (0)	35 (0.1)	1,101 (3.1)	136 (0.4)	0 (0)	249 (0.7)		93 (0.3)	0 (0)	35,814 (100)

Source: KNBS (2016)

E-commerce

Participation in e-commerce by households in Kilifi County is below the national average. About 2.2 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 (2.8%) than women (1.8%). With introduction of stay-at-home

protocols due to COVID-19 online trade has been expected to thrive, little impact will be felt in Kilifi County since fewer households participate in the same.

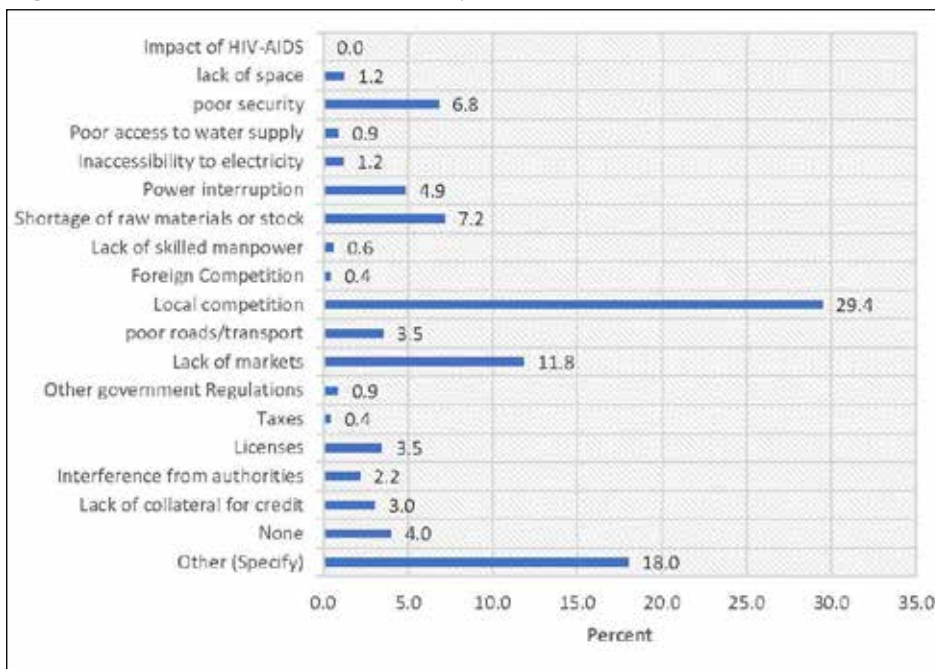
Turnover tax

Only 10 per cent per cent of MSMEs in Kilifi County (3,640) 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

The key constraints faced by MSMEs in the County include local competition (29.4%), lack of markets (11.8%), shortage of raw materials or stock (7.2%), poor security (6.8%), power interruption (4.9%), licenses (3.5%), and poor roads/transport (3.5%) (Figure 5.17).

Figure 5.17: Main constraints faced by MSMEs



Source: KNBS (2016)

A study on County Business Environment for MSEs (CBEM) identified other constraints faced by MSMEs in Kilifi 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.

5.2 Key Messages:

- a) The key sectors that drive the Kilifi County economy include: Services, Agriculture and Manufacturing. Hence, support should be focused to these sectors to ensure re-engineering of the County economy.
- b) Most of manufacturing firm owners in the County have a primary level education. There is need to enhance their skills to improve their productivity.
- c) The main constraints faced by firms in manufacturing include: local competition, lack of markets, poor roads/transport, shortage of raw materials or stock, power interruption, and poor security.
- d) Most of MSMEs in Kilifi County operate in the wholesale and retail trade, repair of motor vehicles and motorcycles; manufacturing; arts, entertainment and recreation; accommodation and food services; among others. Ideally, these are the sectors that have been affected most by the pandemic and need to be prioritized in achieving reengineering and recovery in the County.
- e) Access to credit perennially remains a constraint to MSMEs which hinders growth and expansion of businesses, even more so now during the pandemic. There is need to provide financial support to MSMEs that have demand, employ large number of people, and those that provide essential goods and services.
- (i) 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. However as the pandemic subsides, the transition need to be managed smoothly.
- g) Manufacturing establishments must also adopt to cope with the new guidelines which could include rearranging floor plans to allow for social distancing.
- h) Training and capacity building are important in assisting MSMEs to surmount the shocks faced during the pandemic but also allow for re-emergence.
- i) In terms of re-engineering, there is need to consider establishing support measures to re-vitalize and re-open businesses that collapsed during the crisis within the county.

5.3 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) Agro-processing for value addition with important areas of focus include coconut, mango, fish, cassava, cotton, sisal, cashew nuts, leather production and processing.
- ii) The textile and wearing apparel sectors can be enhanced to provide PPEs for use within the County and potentially for the export market.
- iii) Exploration and processing of minerals such as iron ore, manganese, cement, coral rock harvesting, quarrying, ballast, salt and sand harvesting for both domestic and export markets.

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.

5.4 Emerging Issues

- (i) Proposals to enforce lessening of monetary policies on credit facilities where firms can be offered a grace period to recover from the impact of COVID-19.
- (ii) The County is developing capacity for business community comprising of 78 trading centres, 31,000 licensed retailers, 641 wholesalers.
- (iii) The County is encouraging industries to open up and absorb some of the workforce layoffs
- (iv) Businesses expected to comply with COVID-19 protocols to prevent the spread of COVID-19
- (v) The County has allocated Ksh 105 million in the 2020/21 budget to support trade.
- (vi) The county is making proposal to development partners to be advanced with Ksh. 500 million that will be channeled towards capacity building in the industries and absorption of more labourers

- (vii) There has been reduced income from traders, manufacturers and MSMEs and a corresponding decrease in taxes collected from them. This will affect implementation of Kilifi County's planned activities due to reduced projected revenues.
- (viii) The need to identify and promote specific and emerging value chains as a result of COVID-19, and which Kilifi County has comparative advantage.
- (ix) Review all the ongoing interventions by the County and also the national government to assess their effectiveness and especially regarding trade, manufacturing and MSMEs.
- (x) There is need for legislative amendments to ensure the Buy Kenya Build Kenya initiative is implemented at the County.

5.5 Recommendations

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

- i) Establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, the County will inject some stimulus to cushion the businesses and traders through affordable credit, waiver of some County taxes, cess, and other charges.
- ii) COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), 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 will adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing.
- iv) Install fish processing plants, cold storage facilities and ice plants as planned in the third Medium Term Plan.
- v) Develop Programme for fisheries and maritime infrastructure, for instance, construction of fish ports in collaboration with the national government as provided for in MTP III.
- vi) Revive cotton industries/cottages in the County.
- vii) Develop cottage industries and industrial processing for Cassava, rice, maize, banana, Mango, Cashew nut, Coconut, Citrus and high value horticultural products
- viii) Strengthen existing cottage industries in the County for product value addition and processing.
- ix) Develop and Promote Public Private Partnership for agro-based industries in Kilifi
- x) Collaborate with KEBS to capacity build farmers on the required standards for their products, that is, strengthening community led product processing plants/cottage industries.
- xi) Revive closed industries like the Kilifi cashew nuts and the Mariakani dairy cooperative.

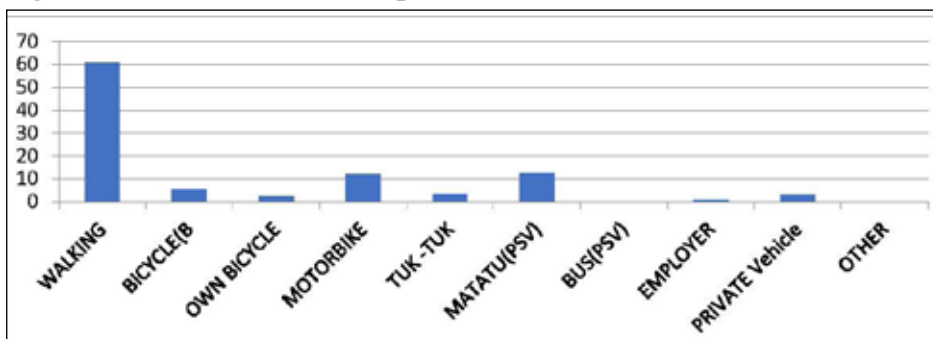
6. Infrastructure

6.1 Transport and roads

6.1.1 Characteristics of the sector

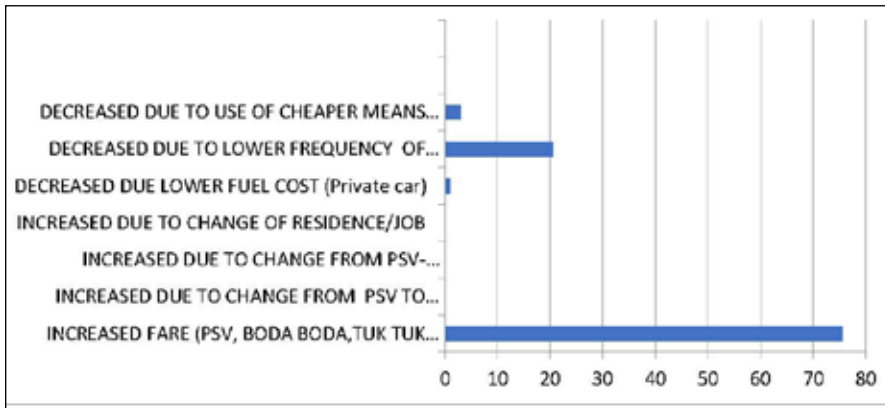
Majority of households own a bicycle (15.3%), a motorcycle (10.4%) and Car ownership is at 2.8 per cent (KNBS, 2019). The main means of transport used in the County is walking at 60.58 per cent, followed by PSV matatus at 12.53 per cent, motorbike 11.93 per cent, bicycle (boda boda) 5.56 per cent and private car at 3.01 per cent, figure 6.1, while 92.03 per cent of the population had not changed the main means of transport (KNBS, 2020b). On average, residents travel 3.57 kilometers to their workplace at an average cost of Ksh 180.34. For the commute to school, residents spend on average Ksh 1187.43 (KIHBS, 2015/16).

Figure 6.1: Main means of transport



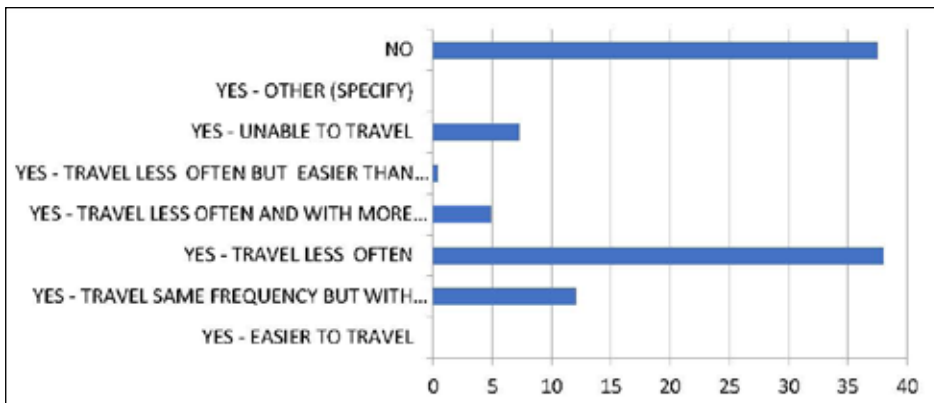
Source: KNBS COVID-19 Impact Survey 2020

The KNBS COVID-19 Impact Survey 2020 revealed that 39.11 per cent of the population reported a change in the cost of travel/commute, figure 6.2. The expenditure on transport increased by 52.17 per cent from Ksh 69 before February 2020 to Ksh 105 in May 2020 for a one-way trip. The main change (75.53%) in transport cost was attributed to increased fares for PSV, boda boda and tuk tuk.

Figure 6.2: Change in cost of main means of transport

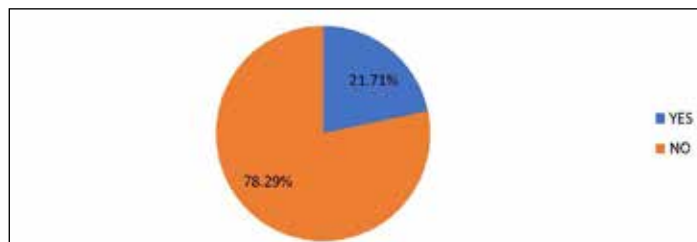
Source: KNBS COVID-19 Impact Survey 2020-wave 2

Residents had changed their travel patterns with 38.03 per cent of the population traveling less often, while 11.99 per cent travelled with the same frequency but with some difficulty, and 7.22 per cent were unable to travel. However, 37.51 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 21.71 per cent of households

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

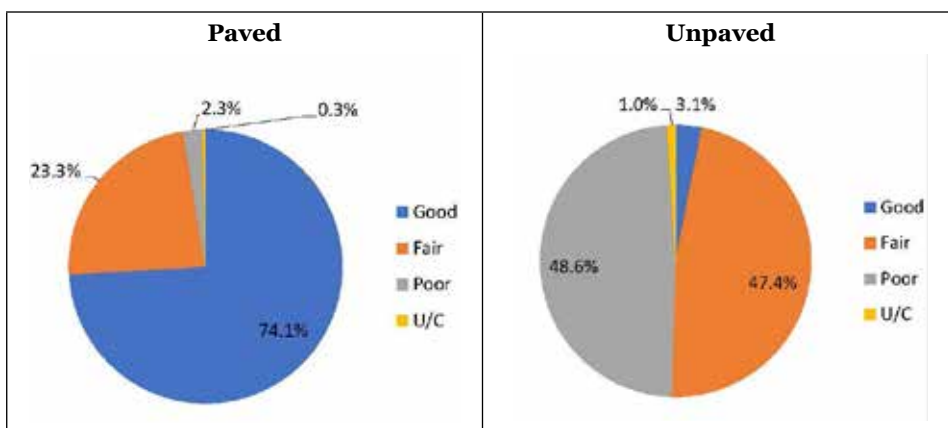
Source: KNBS COVID-19 Impact Survey 2020-wave 2

The County was allocated a total of Ksh 318,515,934 from the Road Maintenance Levy Fund towards road maintenance in the Financial 2017/18 (OCOB, 2019).

Road network

The county has a total of 7,282.64 kilometres of classified road network. The paved County road network covers 38.2 km, while the paved National roads cover 318.33 km. Out of the total paved road network of 356.53KMs, 74.1 per cent is in good condition, 23.3 per cent in fair condition and 2.3 per cent in poor condition. The unpaved road network in the county covers 2870.03 km (county roads) and 721.2 km (National roads), of this, 3.1 per cent is in good condition, 47.4 per cent fair and 48.6 per cent in poor condition as depicted in Figure 6-5 (KRB, 2019).

Figure 6.5: Road condition mix- classified road network



Source: KRB (2019)

The unclassified road network in the County covers 3334.88 km, with 1785.25 km of narrow roads, that is, road with a reserve of between 4 -9 meters, while there is a total of 1549.63 km of new roads.

Constraints faced

The Rural Access Index (RAI) measures the proportion of the rural population who live within 2 km of an all-season road⁴. The county has a RAI of 35 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 48.6 per cent is a constraint to development.

⁴ RAI defined : <https://datacatalog.worldbank.org/dataset/rural-access-index-rai>

6.5.1 Opportunities with COVID-19 in Transport sector

With reference to the 8 point stimulus programme by the National Government⁵ 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 programme⁶ 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) approach⁷ offers a strategic and cost-effective approach to improve rural accessibility in the County.

6.5.2 Emerging Issues

- Poor road conditions for unpaved network
- Low RAI affecting access to rural areas

6.5.3 Recommendations

- i) Integrate sea-based transport with land-based transport to create multi-modal transport systems.
- 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 Goals⁸.
- iii) Identify a core rural road network for prioritization to improve the rural access index (RAI) from the current 35 per cent with a target to match the national average of 70 per cent.
- iv) Collaborate with transport sector stakeholders to register transport operators into formal organizations to enable future County Government support and funding during times of emergency.
- v) Sensitize PSV and boda boda operators on COVID-19 prevention measures and assist vehicle owners in retrofitting vehicle designs for social distance, hygiene and ventilation.
- vi) Identify county significant infrastructure projects, with project speed emphasis, for implementation to support economic recovery from the effects of the pandemic and to take advantage of the blue economy opportunities in maritime transport.
- vii) Re-develop bus parks and termini to address crowding and social distancing concerns stipulated in the public health guidelines.
- viii) Adopt climate smart road engineering designs to safeguard road and bridge infrastructure from floods and sea-based threats.

⁵ 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/>

⁶ Roads 2000 programme <http://krb.go.ke/our-downloads/roads%202000%20strategic%20plan.pdf>

⁷ LVSr /Roads 10,000 programme <https://www.kerra.go.ke/index.php/lvsr>

⁸ Sustainable Mobility for All: <https://sum4all.org/implementing-sdgs>

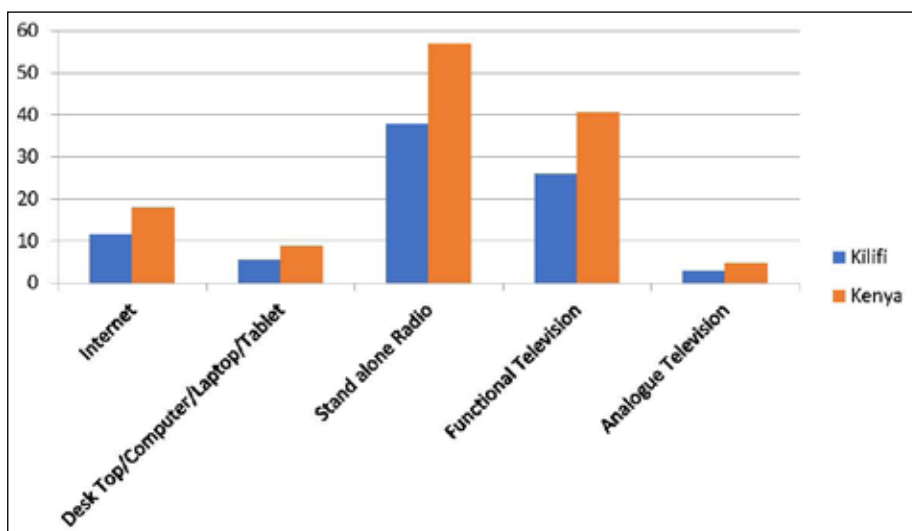
6.2 Information and Communication Technology

The county is using ICT mostly in the education sector to ensure innovation and teleconferencing learning.

6.2.1 Characteristics of the sector

The analysis of the 2019 KPHC reveals that only 11.6 per cent of the conventional households in the county ‘own’ internet with 5.5 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.

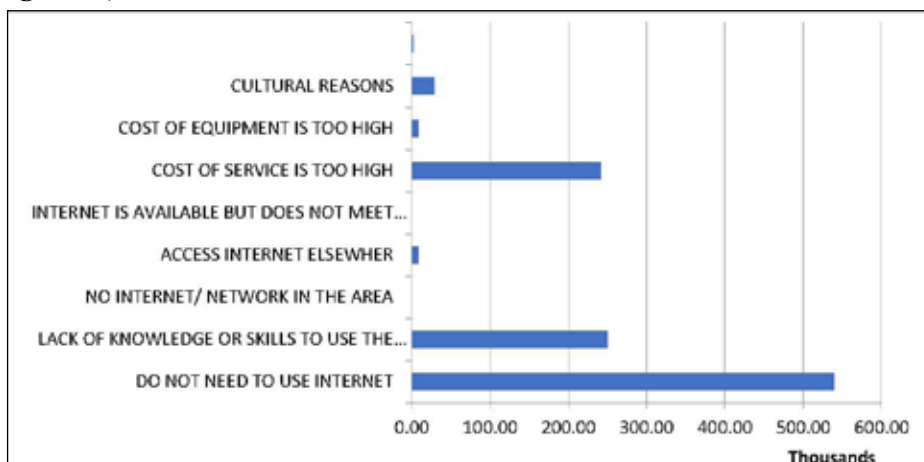
Figure 6.6: Percentage distribution of conventional households by ownership of ICT assets



Source: ICT Data 2020; KPHC 2019

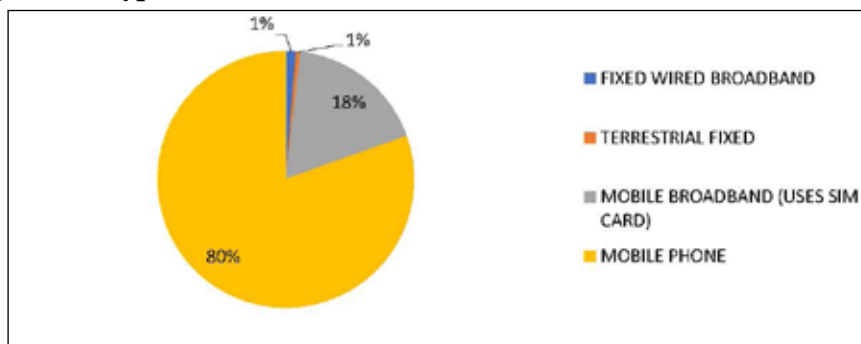
Online shopping is not prevalent in the County. 2.2 per cent of the conventional households searched and bought goods/services online. There exists gender disparity in online shopping with more men (2.8%) than women (1.8%) undertaking online shopping.

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 (KHIBS). 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 80 per cent of the internet users in the county rely on mobile phone for connectivity, with a marginal population of 18 per cent relying on mobile broadband that uses a sim card for connectivity.

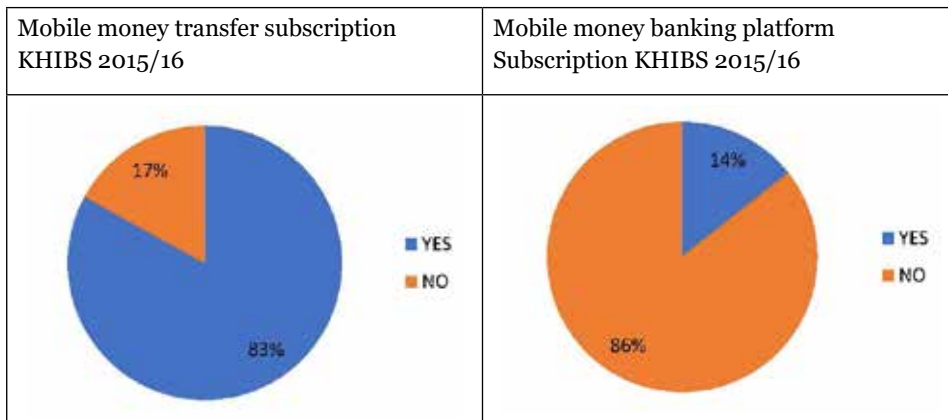
Figure 6.8: Type of Internet connection

Source: KNBS, 2016- KIHBS 2015/16

Approximately 39.4 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 83 per cent of the people in the county have a mobile money subscription compared with only 14 per cent that have mobile money banking platform subscription (KHIBS 2015/16), Figure 6.9.

Figure 6.9: Mobile money transfers, subscriptions, 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 18.6 per cent of the men and 11.9 per cent of the women using internet, while 8.0 per cent of the men and 5.3 per cent of the women using Desktop/Laptop/Tablet devices (KPHC 2019). While the usage is below the national averages, the county recorded a similar gender disparity with the national averages in internet and ICT usage.

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
- High cost of internet services affecting uptake and use by households.

Linkages to other sectors

- ICT has linkages to education, public service delivery and is enabler to business continuity during the pandemic and other disaster or emergency situations.

6.2.1 Opportunities for CIVID-19 in ICT

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

6.2.2 Recommendations

- i) Harness the power of technology and use innovative solutions to bridge the gender digital divide.

- ii) Support programmes in partnership with the private sector that will enable households acquire ICT assets such as smart phones and laptops and increase mobile phone ownership from the low of 39.4 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony⁹
- iii) Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund¹⁰ as a “last resort” in providing ICT access in remote areas where market forces fail to expand access.
- iv) Collaborate with IT personnel in universities to support the development of ICT competence and skills among the public and bolster a digital economy.
- v) Negotiate with the public primary schools for community access to ICT infrastructure and collaboratively build and equip youth empowerment, ICT centers and ICT laboratories as provided in the CIDP.
- vi) Enhance internet connectivity to public buildings and key trade centres to boost e-commerce especially for MSMEs in trade and business. The NOFBI programme can be expanded to the sub-county administrative units to further enable deployment of e-governance solutions.
- vii) Make ICT a standalone sector for planning and budget allocation. This is aimed at giving strategic prominence to planning, budgeting and investment in ICT.
- viii) Review and implement ICT policies and procedures to manage ICT and mitigate cyber threats. 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.

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

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

7. Housing and Urban Development

The sector experienced a decline during this period. Rent as a revenue was not collected by the government. For private sector, this was passive hence income level declined. Real estate projects within the county declined. Approval for construction permits declined and there were no activities on follow up. Construction sites became dormant leading to job losses in the sector.

The county has partner with Government of Britain has been implementing an infrastructure along to make Malindi a tourist destination, this project became dormant during COVID-19 but meetings are undergoing to revive the project to strengthen the real estate and tourism sector.

There are nine urban centers in the County with a total population of 48.6 per cent males and 51.4 per cent females, table 7.1. The urban land area covers 169 square kilometers with a population density of 2,325 persons per sq.km

Table 7.1: Distribution of population by urban centers by gender

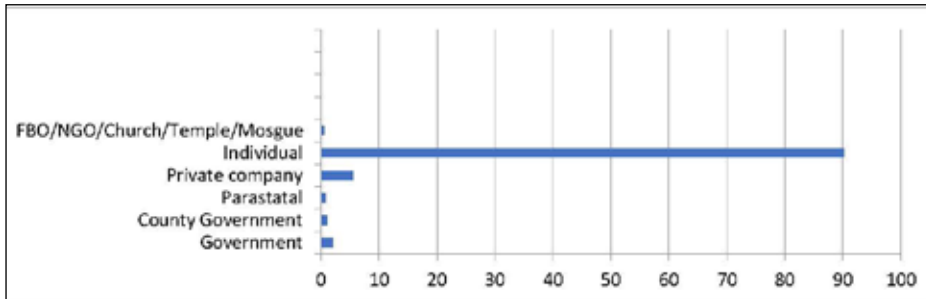
Urban Center	Population	Male	Female
Malindi	119,859	58,113	61,742
Mtwapa	90,677	43,890	46,786
Kilifi	74,270	35,790	38,479
Watamu	27,857	14,030	13,827
Vipingo	12,183	6,150	6,033
Gongoni	10,993	5,295	5,698
Marereni	7,085	3,393	3,692
Kaloleni	7,016	3,319	3,697
Bamba	2,015	918	1,097

Source: KNBS, 2019 -Kenya Population and Housing Census

7.1 Characteristics of the Sector

The housing tenure is predominantly owner occupied at 66.9 per cent, with 33.0 per cent of the households under rental tenure. Individuals are the primary providers of rental housing at 90.2 per cent, followed by Private Companies (5.5%); and National Government (2%); For those who own homes, 96.4 per cent constructed the houses while 1.5 per cent purchased the house and 2.1 per cent inherited their homes (KNBS, 2019).

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



Source: KNBS, 2019 -Kenya Population and Housing Census

Majority of households are headed by men (61.94%) compared to women (38.06%) in the County (KIHBS, 2015/16).

Housing quality

On average, the main dwellings of houses in the County have 2.15 habitable rooms against an average household size of 5.48 persons in a household, translating to approximately 2.55 people per room. According to the UN-Habitat, overcrowding occurs when there are more than three people per room¹¹. In terms of housing quality (building material), 52.99 per cent of houses are constructed using finished materials for walls, floor and roofing compared to 47.01 per cent constructed using rudimentary materials (KIHBS, 2015/16). Majority of households (71.6%) have iron sheets for roofing, mud/cow dung walls (38.8%) and Earth/sand floors (54.3 per cent) (KNBS, 2019).

Rent payment

On average, rental households spend approximately Ksh 4185 on rent with a minimum of Ksh 700 and the maximum of Ksh 30000 (KNBS, 2020b). The county recorded a rent to income ratio of 21.05 per cent which is within the acceptable threshold of 30 per cent (KNBS, 2012/13).

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

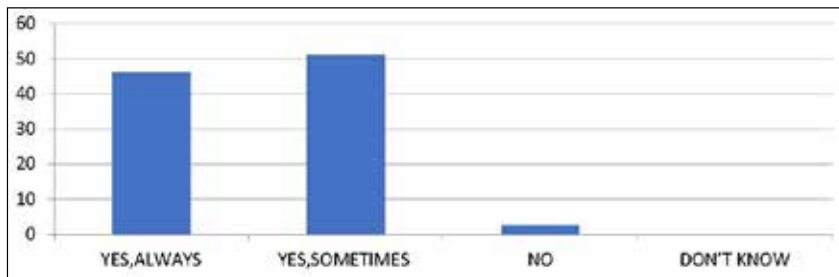


Source: KNBS COVID-19 Impact Survey 2020 wave 2

¹¹ Household crowding measure

With the advent of COVID-19 pandemic, households' ability to pay rent has been affected, with 35.96 per cent of the population indicating inability to pay rent on the agreed date for April 2020, figure 7.2, compared to 15.91 per cent of the population that were able to pay rent on the agreed date and 46.26 per cent who paid rent on agreed date before COVID-19 pandemic, figure 7.3.

Figure 7.3: Proportion of residents paying rent per terms of contract



Source: KNBS COVID-19 Impact Survey 2020 wave 2

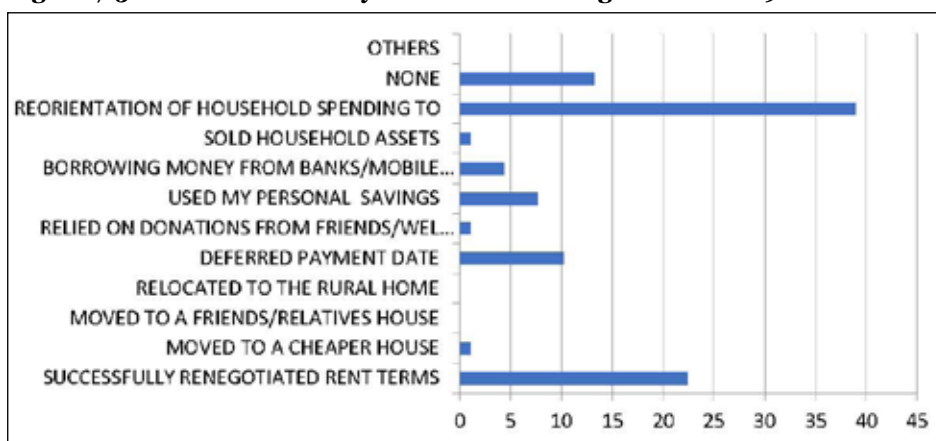
The main reason that has made households unable to pay rent was attributed to reduced incomes /earnings, reported by 48.87 per cent of the population. The inability to pay rent was attributed to the COVID-19 pandemic by 100 per cent of the population, figure 7.4.

Figure 7.4: Reasons for not being able to pay rent



Source: KNBS COVID-19 Impact Survey 2020 wave 2

Majority of the households (91.97%) did not receive a waiver or relief on payment of rent from the landlord, with 0 per cent reporting a partial waiver and 1.09 per cent reporting a full waiver. To overcome the effects of Corona virus on payment on rent, majority 22.37 per cent of households renegotiated rent terms, while 13.24 per cent of households did not take any measures. Approximately 7.63 per cent used personal savings to pay rent, figure 7.5.

Figure 7.5: 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, 87.5 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
- The sector experienced a decline during this period. Rent as a revenue was not collected by the government. For private sector, this was passive hence income level declined. Real estate projects within the county declined. Approval for construction permits declined and there were no activities on follow up. Construction sites became dormant leading to job losses in the sector.

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.

7.3 Emerging Issues

- There are households that occupy dwellings constructed using rudimentary materials.
- In the post COVID period, the county envisions to improve on turnaround period for transactions that were underway both for land and constructions so that approvals can be given to allow stimulation in the sector.
- The county has partner with Government of Britain has been implementing an

infrastructure along to make Malindi a tourist destination, this project became dormant during COVID-19, but meetings are undergoing to revive the project to strengthen the real estate and tourism sector

7.4 Recommendations

- i) Formulate urban development plans that integrate the smart cities and smart planning concepts to ensure continued services delivery and efficiency in service provision during emergencies.
- ii) Integrate the blue economy in spatial planning for human settlements and urban areas along the Indian Ocean with the objective to balance sea-based and land-based activities livelihoods.
- iii) Adopt programmes aimed at an increasing household access to clean energy sources and technologies for cooking to mitigate against exposure to respiratory diseases.
- iv) Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System. To be used pandemic and disaster surveillance and emergency response.
- v) Develop a policy to promote home ownership to address the problem of rent distress during times of emergency.
- vi) Fast-track implementation of the affordable housing programme in partnership with the private sector targeting urban centers.
- vii) 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.

8.1 Characteristic of the Sector

The County is rich in endemic flora and fauna, attractive physiographic features and tropical climate, and sites of historical importance that makes it a unique tourist destination. It is endowed with sunny and sandy beaches, magnificent landscapes, tropical and marine forests and swamps that are home to endemic flora and fauna. The key tourist attractions in the County include: Physical attractions / nature-based tourism (archaeological monuments at Gede, Malindi, Takaungu, Mnarani and Rabai, dating back to the slave trade period); Beach tourism (265Km Indian Ocean beach and marine-based recreational facilities and beach hotels); Cultural and heritage tourism (Swahili/Arab and Mijikenda cultures; *Kaya* forests world heritage site); Wildlife tourism (the Malindi and Watamu Marine parks that are UNESCO designed biosphere reserves; the Mida Creek; and the Arabuko Sokoke forest reserve). With regard to sports tourism, water sports activities are found at Mtwapa, Mida, Kilifi and Ngomeni creeks; and an international golf club at Vipingo. Ecotourism opportunities are available at marine parks. Other attractions include M.I.C.E and medical tourism.

Annually, the county receives around 150,000 tourists, some of whom are accommodated in the over 378 registered facilities with an estimated bed capacity of 12,085. Out of these hotels there are 11 star-rated hotels with a total capacity of 739 rooms and 1495 beds. There are 367 other unclassified accommodation facilities accounting for 91.5 per cent of the bed capacity, that include hotels, villas, cottages, lodges and guest houses.

Accommodation and food services contributes only 1.2 per cent of the total GCP despite the county's rich endowment in hospitality infrastructure. The county government planned to allocate Ksh 4.018 million of the proposed Ksh 392,026 million (1.02%) to tourism development and promotion during the 2018-2022 planning period. This is meagre in relation to the strategic importance of tourism to the county economy.

In terms of linkage with other sectors, the upcoming Utalii College is expected to open a new frontier in the tourism sector. The ongoing expansion of Malindi international airport and Mombasa-Lamu road will open more opportunities for investments in tourism. The Vipingo airstrip has opened doors for charter planes in the region with the recently launched standard gauge railway (SGR) supporting access to the destination. The opening of Mariakani- Kilifi road has equally eased transport with Bamba-Kilifi and Tsavo East National Park-Malindi road leveraging on infrastructure.

8.2 Opportunities with COVID-19 in Tourism Sector

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

8.2 Emerging Issues

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

8.3 Recommendations

Re-engineering the tourism sector in Kilifi County will include:

- i) Optimization of existing tourist attraction sites for maximum benefits.
- ii) Preserving and conservation of historic and cultural tourist attraction sites.
- iii) Exploring new tourist attraction sites.
- iv) Promoting production of basic requirement in hospitality sector.
- v) Aggressive branding and marketing of Kilifi County as a preferred tourist destination.
- vi) Creating and enhancing capacity building institution as a way of creating an enabling environment for tourism and hospitality sector.
- vii) Leveraging on marine transport to promote tourism.
- viii) Building synergies between tourism and the blue economy.

9. Health

9.1 Characteristics of the Sector

In 2019/2020, the number of health facilities in the county were 366 which comprised of 352 primary health facilities and 14 hospitals. This was an improvement from a total of 199 health facilities in the previous year, 2018. The number of beds per 10,000 population is 15 against the WHO recommendation of 30 beds per 10, 000 population.

Table 9.1: Health Provision

Year	2018	2019/20
Health facility density		
Primary health facilities	188	352
Hospitals	11	14
<i>Number of health facilities</i>	199	366
Health facility density	3.4	5.3
Bed density		
Hospital beds	982	1,016
No. of Beds per 10,000 population	15	15
Human resource density		
Total workforce	1,192	4,101
Human Resources for Health (Technical)	840	1,503
Number per 10,000 population	6.5	10.0

Source: Ministry of Health (2021)

The health facilities and personnel serve a growing population of 1,453,787 people according 2019 census. In 2019, total health workforce was approximately 4,101 representing 10 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	13.2
Government health centre	15.0
Government dispensary	36.5
Faith-based (church, mission) hospital / clinic	1.8
Community health	0.0
Private hospital / clinic	27.6
Nursing/ Maternity home	0.3
Pharmacy/Chemist	1.0
Community health worker	0.1
Shop/ Kiosk	9.6
Traditional healer	0.3
Faith healer	0.0
Herbalist	1.1
Other	0.0
Number of Individuals ('000)	315

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 the County residents who reported illness visited government dispensaries (36.5%) followed by those who visited private hospitals (27.6%), government hospitals (13.2%) and Government health centre at 15 per cent. About 1.8 per cent of county residents who reported illness also 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, 17.8 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 95.9 per cent of the population. Private contributions to insurance cover were reported by 1.3 per cent of the population while Employer Contributory was reported by 1.3 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)	1,400
Share of population with health insurance (%)	17.8
NHIF	95.9
Private-Contributory	1.3
Private-Non-Contributory	1.0
Employer-Contributory	10.5
Employer-Non-Contributory	0.5
Other	0.0
Number of Individuals ('000)	249

Source: KIHBS 2015/16

Place of delivery

In the 2015/16 KIHBS, women in the 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 35.3 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 23.6 per cent, 22.6 per cent, and 11.5 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	23.6
Health Centre	22.6
Clinic/ Dispensary	11.5
Maternity Home	0.3
At Home	35.3
Other	1.8
Not stated	5.0
Number of Individuals ('000)	222

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 44.2 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 5.8 per cent were fully immunized against measles at 18 months.

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

		Proportion of Children
Vaccination Card	Yes Seen	61.5
	Yes, Not Seen	18.9
	No	1.6
	Not stated	18.0
Measles Vaccination	Measles I (At 9 months Card)	44.2
	Measles II (At 18 months Card)	5.8
	Measles II (Mother/ Guardian memory)	22.1
	Either (card or memory)	66.3
Number of Individuals ('000)		222

Source: KIHBS 2015/16

This has been aggravated by other factors such as shortage of health workers, low staff morale, staff out-migration, inequitable distribution, poor HR management, heavy workload, inadequate medical equipment and supplies, lack of recognition, negative attitude towards work, deplorable working conditions, poor communication channels and inadequate support supervision.

Health outputs

The five most common diseases in the County among children under five years in order of ranking are Upper Respiratory Tract Infections, Diarrhea, Diseases of the skin, Malaria and Pneumonia. On the other hand, Upper Respiratory Tract Infections (URTIs), Diseases of the skin, Malaria, Urinary Tract Infections (UTIs) and Diarrhea have high incidences among the general populations in the county. The health status of the County's population was on an increasing trend since 2014 following devolution and implementation of UHC interventions by the County. The share of fully immunized children in the county improved from 69.4 per cent in 2014 to 74 per cent in 2018. The number of women who had access to skilled delivery increased from 41.7 per cent in 2014 to 52 per cent in 2018 following the introduction of free maternity services in 2013.

The provision of proper nutrition especially to children under five is imperative for the health and wellbeing of the society. Good nutrition promotes health and reduces mortality especially among mothers and children. The prevalence of stunting among children under five years stands at 39 per cent in the county. Additionally, 4.1 per cent and 16.9 per cent of children under five years are wasted and underweight across the county. The key causes of malnutrition include sub-optimal maternal infant and young child nutrition and care practices, poor health seeking behaviour and household food insecurity coupled with poverty. There is need to strengthen the implementation of the High Impact Nutrition Interventions at health facility and community level, the county food and nutrition security multi-sectorial collaboration initiatives and advocacy for a strong political will to address malnutrition. Targeted hunger and social safety net programs for the vulnerable groups and integration of nutrition and school health program in all ECDE centres will also go a long way in addressing malnutrition.

The ultimate aim of immunization is to ensure that children who are less than five years are protected against childhood diseases such as tuberculosis, polio, tetanus hepatitis B and measles among others. The immunization coverage stands at 74 per cent, implying that 26 per cent of legible children miss out of immunization across county. In essence, a significant proportion of children are highly exposed to otherwise preventive children hood diseases in the county. Therefore, the departments will, during the plan period, focus on strengthening immunization sensitization campaigns, sustained provision of incentives to maternal mothers in a bid to increase the promotion of children who are fully immunized in the county.

The HIV epidemic continues to disproportionately affect the socio-economic spectrum of the entire county. The county has HIV prevalence of 3.8 per cent. The county thus is grappling with the rapid increase in the new infections amongst adolescents and young people. This exemplified by the fact that only 69 per cent of the adults receive ART. Multiple factors including the tourism industry, drug and substance abuse, peer influence, risky sexual behaviors and inadequate employment opportunities drive HIV/AIDS new infections among young men and women in the county. Significant to note is the fact that the reduction in AIDS related deaths and the increase in new infections amongst adolescents and young people has significantly increased the total number of Persons living with HIV (PLHIV), translating into an increased treatment burden for the county. Most of the HIV financing by both the county government and development partners has been redirected to care and treatment programs, which have result to improved health outcomes of PLHIV.

Table 9.6: Health indicators in Kilifi County

Key Health Indicators	County Estimates
Maternal and Child Services	
<i>Skilled delivery (%)</i>	52.3
<i>Children born at home</i>	46.6
<i>Fully immunized child</i>	74.1
Child Mortality	
<i>Infant mortality (*1000)</i>	0
<i>Under-5 mortality (*1000)</i>	131
<i>Neo-natal mortality (*1000)</i>	32
Nutrition Status	
<i>Stunted children (%)</i>	39.1
<i>Wasted children (%)</i>	4.1
<i>Underweight children (%)</i>	16.9
HIV (%)	
<i>HIV adult prevalence (%)</i>	3.8
<i>Children with HIV(No.)</i>	0
<i>ART adult coverage (%)</i>	69
<i>ART children coverage (%)</i>	92

Source: KDHS, 2014; DHIS 2018

Effects of COVID-19

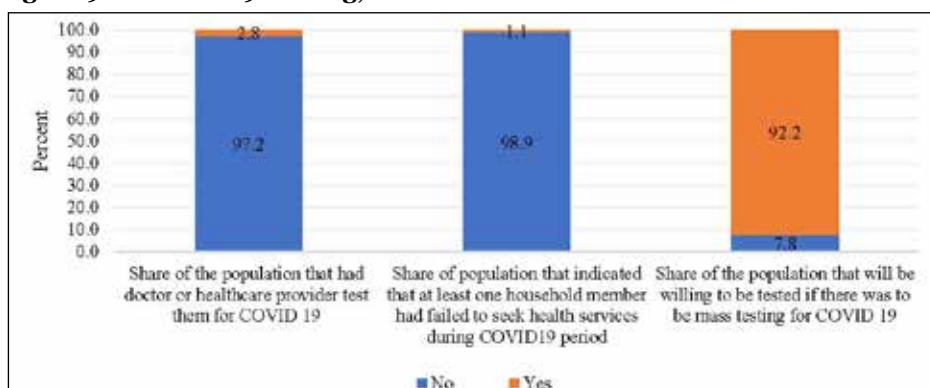
Kilifi County has two main isolation centres Jibana Sub County Hospital with 40 isolation beds and Mbudzi Health Centre with 40 isolation beds. The county has experienced great progress in the health sector. Since devolution in 2013, the department has progressively increased its work force from 907 to 1426 accounting for 32 per cent increase by close of 2017. Investment in health is still in progress. This notwithstanding, the sector still has staff shortages, unequal distribution, high attrition especially in the hard-to-reach areas, out migration among others. The situation has worsened with the outbreak of COVID-19. It is one of the 42 counties with reported cases of COVID-19. The county has recruited additional 138 health care workers under the UHC program to boost human resource capacity and 89 more are in the process of being recruited. Ministry of health has equipped the county referral hospital with renal, radiology & theatre equipment under the MES program to boost health outcome in the area and especially now that there is COVID-19. The county has one accredited COVID-19 laboratory important for detecting the virus.

The Kilifi County government also set aside Sh.75 million emergency funds to facilitate in setting up of four isolation centers for suspected cases of coronavirus. Jibana, Ganze, Msumarini and Gede health facilities have isolation wards for suspected patients with others yet to be identified by the health department. The County under department of Health launched a County Service COVID-19 Preparedness and Response Centre with a hotline number operating for 24 hours to respond to local cases and create awareness on COVID-19. In addition, the county and other well-wishers are responding to the Presidential call to help those affected with the loss of livelihoods as a result of the pandemic.

The ongoing pandemic has also exposed the Kilifi healthcare system in a number of ways: There is acute shortage of Doctors, Nurses and specialists within Kilifi county which could deal a massive blow in an effort to mitigate the virus; Most of the healthcare workers at Kilifi county are not adequately trained on the management protocols of COVID-19 and infection prevention control; Inadequate PPEs among the frontline healthcare workers working in high risk areas; Inadequate psychological support to the frontline healthcare workers working under undue pressure of increased patient load and inadequate PPEs; and The frontline healthcare providers lack proper accommodation plans within the health sector thereby there is increased possibility of cross- infection to their families.

Due to the stigma of COVID-19, the health-seeking behavior of the Kilifi citizens has also been affected. There has been significant decline in the number of pregnant women attending maternal child health clinic thereby increasing their risk of early and late pregnancy complications. Also, there has been acute decline in the number of children going for immunization services therefore this could lead to increased susceptibility of these children to infections and nutritional imbalances.

A recent COVID-19 survey done in June 2020 showed that the share of the population that had doctor or healthcare provider testing or confirming to them the status in regards COVID-19 was estimated at 2.7 per cent in 2020 (COVID-19, Wave 2 survey). Further only 0.9 per cent of the population indicated that at least one household member had failed to seek health services and 92.3 per cent of the population indicated they will be willing to be tested if there was mass testing for COVID-19.

Figure 9.1: COVID-19- testing, 2020

Source: COVID-19 Wave 2 (June 2020).

The County has high gender inequalities and low women Empowerment. The County will need to promote women's empowerment through income generating initiatives and affirmative action programmes for better health outcomes for children, youth and women. Continued investment and partnerships in awareness raising initiatives towards ending violence against women and girls will promote social inclusion, leading to transformative development for the county.

There have been notable efforts by some NGOs such as the World Vision that has gone out of its way to train the Kilifi women on soap making through the Livelihood and Resilience Programs thus enabling households to generate incomes. This initiative has made soap available and accessible to families at an affordable price. It has also reduced the transport cost and long distances that might be taken by the vulnerable like girls, which might expose them violence. However, the challenge with such initiative was on the fact that most of the residents were unaware of this thus unable to effectively participate in the program.

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

The county has incorporated a strong focus on outreach into their County Integrated Development Program. Their aim is to facilitate and run 60 outreach health facilities within the next five years. The county government recognizes that transformation will only be successful if it integrates healthcare financing, adequate human resources and proper data collection to inform the health interventions needed in the county to recovery from COVID-19 effects.

In some of the sections of the county, community members also consult traditional healers on issues relating to witchcraft. Though anecdotally estimated to have minimal prevalence,

such cultural beliefs influence health for example the way people seek health care and prevent illness.

Various surveys undertaken in the nutrition arena within the county have highlighted undernutrition in some sections of the county such as Kilifi North. Households adopt survival mechanisms of taking one to two meals especially in the pastoral and agro pastoral zones in response to the challenge. Climatic conditions characterized by drought diminish pastures and browsers, and lead to tribal conflicts thus worsening the situation.

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. The access and provision of these materials were affected by the outbreak of the pandemic, the demand outweighed 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 down 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. Fishing 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

Some of the projects started by development partners are discussed below. DANIDA Health Sector Programme Support III (Kenya) introduced Nomadic Clinics, which can help handle community support for any emerging COVID-19 cases. The clinics offer basic health services such as immunization and skilled birth attendance. To ensure further outreach motorbikes are attached to each clinic and these are sent out into the community in special circumstances such as to ensure that children do not miss their immunization shots.

World vision has donated hundreds of water tanks, over 1000 liquid hand soaps, 700 liters of hand sanitizers and 10 fumigating equipment in a programme aimed at creating awareness on the need to do regular hand washing. The World Vision also partnered with the public health officials in the county to train and sensitize the public over COVID-19.

The Safaricom foundation has also handed over PPEs to benefit around 300 healthcare workers in two health centres and an isolation facility. The PPEs included N95 Masks, Surgical masks and protective clothing. The Kenya Red cross in partnership with Safaricom foundation in helping the households affected by flood.

Additionally, there is an enhanced collaboration within the Pwani regional block 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. Additionally, due to reduced social contacts many 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.

9.3 Emerging Issues

The COVID-19 pandemic has increased the demand for isolation centres, admission beds, ICU and HDU beds. It has also overstretched the existing health facilities. Additionally,

with 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.

9.4 Recommendations

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

- (i) The county to promote construction, upgrading and equipping of health facilities through additional funding to health sector, this will enable the county to achieve quality and affordable health care.
- (ii) 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 fear of contracting COVID-19 in event of visiting an health facility.
- (iii) The county to promote the use of telemedicine, toll free lines, virtual meetings and trainings, as an alternate means of offering health care services and increasing access to health care services by the community.
- (iv) The county to encourage increment of diagnostic capacity (personnel, infrastructure, and equipment) to offer diagnostic services to the entire county to include specimen referral mechanisms.
- (v) County to provide enough water collection points and water use facilities in the health facilities to allow convenient access to, and use of, water for medical activities, drinking, personal hygiene, food preparation, laundry and cleaning.
- (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 Kilifi County.
- (vii) Improve the health insurance and assistance system for disastrous diseases. In the event of emergencies health insurance agencies should allocate part of the health insurance fund in advance to ensure that hospitals provide treatment before charging fees.
- (viii) Prepare and enroll high number of health officers to offer fair fundamental types of assistance all through a crisis, constraining direct mortality and maintaining a strategic distance from expanded circuitous, this intervention is in line with CIDP 2018-2022 of increasing staff patient ratio.
- (ix) Invest in research and development to spur innovation in health sector including in medicine and member states could consider including this in the stimulus package.

10. Education and Training

10.1 Characteristics of the Sector

Kilifi County has a total of 1609 pre-primary centers, 756 primary and 249 secondary schools. 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 preparation for re-opening.

The county has a total of 756 primary schools comprising of 543 public and 213 privates. The County has a total of 249 secondary schools, comprising of 196 public and 53 privates. Enrolment in public secondary schools stands at 53,149 thus 29,322 boys and 23,268 girls, whereas the private has 4032 boys and 3750 girls making a total of 7787 students. This translates into a Gross Enrolment of 60,936 students in secondary schools at the county level. Secondary school teachers in the county are 851 male and 483 female thus a total of 1334. Teacher pupil ratio is at 1:83 which is more than twice the recommended ratio of 1:40.

In terms of tertiary institution, Pwani University is the only public university in the county with an enrolment of approximately 8,000. There are also campuses of four universities including MT Kenya University and Nairobi University, located in Malindi town, offering different market driven courses. Additionally, county has nine private accredited colleges; one middle level college (KMTC Kilifi) and 28 youth polytechnics. These institutions offer youth a chance to further their skills to make them competitive in the labor market.

There are 2 technical training institutions in the county namely: - Godoma technical training institute in Ganze Sub County and Weru technical training institute in Malindi Sub County. The total enrolment of the two institutions is 203 students, i.e. 118 male and 85 females. Teachers for the 2 institutions stand at 4 male and 3 female making a total of 7

The county has 799 public ECDE centres with a total of 1723 teachers, 123 male and 1600 female. There are also 810 private Early Childhood Development Education Centers (ECDE) with a total of 1,513 teachers, 76 male and 1437 female. Gross enrolment at pre-school level stands at 135,571 pupils. Those in the public are 45445 boys and 44265 girls while those in the private are 22968 boys and 22813 girls. Transition Rate from pre-school to the next level is 45 per cent, implying that an estimated 55 per cent of the pupils don't proceed to primary education. The teacher pupil ratio for those employed by the county is 1:130. Teacher pupil ratio considering those employed by parents is at 1:50.

About 90 per cent of public primary schools in Kilifi 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 127.1 per cent while that of primary school and secondary school was 105.9 and 44.3 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, 110.8 per cent, compared to that for females, 101.5 per cent. The GAR for primary school was higher for males, 110.8 per cent, compared to that for females, 101.5 per cent. The GAR for secondary school was higher for males, 45.5 per cent, compared to that for females, 43 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 64.7 per cent, 72.9 per cent and 20.4 per cent, respectively.

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

Education Level	Gender	Gross Attendance Ratio	Net Attendance Ratio
Pre-Primary School	Male	134.2	61.1
	Female	121.4	66.0
	Total	127.1	64.7
Primary School	Male	110.8	69.3
	Female	101.5	76.1
	Total	105.9	72.9
Secondary School	Male	45.5	22.7
	Female	43	17.7
	Total	44.3	20.4

Source: KIHBS 2015/16

Basic education gross and net enrolment rate

The pre-primary gross enrolment rate in the county was 105.0 per cent in 2019 and while the net enrolment rate was 57.1 per cent. The Gross Primary and Secondary enrolment rates stood at 58.4 per cent and 114.2 per cent respectively in 2019 while the Net enrolment rates (NER) were 23.6 per cent and 76.2 per cent for primary school and secondary school respectively during the same period.

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

Pre-primary	2019
Gross Enrollment rate (GER) (per cent)	105.0
Net Enrollment rate (NER) (per cent)	57.1
Gender parity index	0.97
Primary	
Gross Enrollment rate (GER)(per cent)	114.2
Net Enrollment rate (NER) (per cent)	76.2
Gender parity index	0.98
Secondary	
Gross Enrollment rate (GER) (per cent)	58.4
Net Enrollment rate (NER) (per cent)	23.6
Gender parity index	0.91

Source: KNBS (2021)

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.

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 80.1 per cent with the male population being more literate (90.7%) compared to their female counterparts (70.4%).

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

	Ability to Read and Write	Percentage Distribution (%)
Overall county	Literate	80.1
	Illiterate	17.3
	Not Stated	2.6
	Number of Individuals ('000)	773
Male	Literate	90.7
	Illiterate	7.2
	Not Stated	2
	Number of Individuals ('000)	369
Female	Literate	70.4
	Illiterate	26.4
	Not Stated	3.2
	Number of Individuals ('000)	404

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 56.6 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 20.2 per cent and that of KCE/ KCSE qualification is 8.9 per cent.

Table 10.4: Percentage distribution of population by highest educational qualification

Highest Educational Qualification	Percentage Distribution of Population
None	56.6
CPE/ KCPE	20.2
KAPE	0.3
KJSE	0.1
KCE/ KCSE	8.9
KACE/ EAACE	0.3
Certificate	3.5
Diploma	2.8
Degree	1
Basic/post literacy certificate	0.1
Other	0.2
Not Stated	5.8
Number of individuals ('000)	1,094

Source: KIHBS 2015/16

Percentage distribution of Kilifi 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 53.3 per cent while that of females was 55.8 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, 15.2 per cent of males and 15.1 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 per cent and 0.8 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 Kilifi County (%)

Educational Level	Gender	Percentage Distribution of Population 3 Years and above
Pre-primary	Male	15.2
	Female	15.1
Primary	Male	53.3
	Female	55.8
Post primary vocational	Male	1.5
	Female	2
Secondary	Male	16.7
	Female	12.9
College (Middle-level)	Male	7.1
	Female	5.4
University	Male	2
	Female	0.8
Madrassa / Duksi	Male	0
	Female	0
Other	Male	0.5
	Female	0.3
Not Stated	Male	3.7
	Female	7.6
Number of Individuals ('000)	Male	550
	Female	545

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.

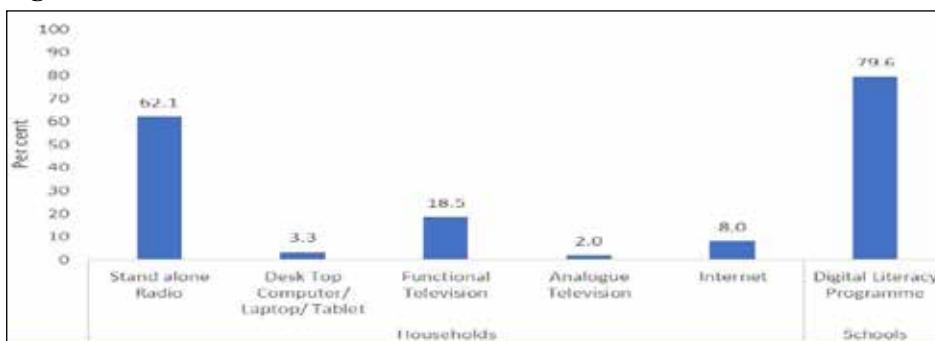
Just like other counties, many people in Kilifi County lost their jobs because of the COVID-19 pandemic. Private schools were forced to lay off both teaching and support (casuals) staff because they could not sustain their salaries. Public schools faced challenges in making payment for the other expenses 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 Kilifi County were severely affected as a result 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 as a result of the COVID-19 pandemic. With regards to access to ICT in Kilifi County, 37.1 per cent 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 per cent 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: KNBS, 2019

On the linkage to other sectors, Agriculture provides food for the school going children. Therefore, it plays a key role in ensuring that the school going children get food of the required quality and quantity. It is always children who are in the right health status who are able to concentrate and learn in classes. Therefore, good health ensures continuity of learning among the pupils and students. It is in schools where children are taught about good health hygiene which contributes to reduced diseases spread. ICT plays a key role especially now that schools have been closed and people are advocating for online classes. Good internet connectivity, possession of laptop/desktop computer, iPad, TV, and radio would greatly facilitate the online learning.

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. The pandemic has provided an opportunity for enhancement of the health facilities through advancement in equipment and employment of more health personnel in the county.

10.3 Emerging Issues

The County with support from stakeholders to continue investing in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers, provision of sanitation facilities and enhanced school feeding programme. To achieve these objectives, the county 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.

10.4 Recommendations

- (i) The County with support from stakeholders to continue investing in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities.
- (ii) The county to 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 in order 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 are 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 to 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

According to the KNBS census 2019, Kilifi County has a population of 1,453,787 of which 3.8 per cent are the elderly and 1.6 per cent are people living with disabilities. The overall poverty rates in the county stand at 59 per cent which is higher than the national average (36.1 per cent). The county's food poverty levels are at 46 per cent and 47 per cent of the total population is multidimensionally poor. Further, about 39 per cent of the children population is stunted. The impact of the COVID-19 to the county's economy cannot be gainsaid.

There is a total of 88,202 desegregate Orphans and Vulnerable children (OVCs) who live in different parts of the county. Currently a total of 35,000 children drawn from 11,222 households benefit from cash transfers. This implies that 60.3 per cent of the total (OVCs) is not covered by the social protection interventions, and therefore they are disfranchised by poverty and other kinds of vulnerabilities. There is need to ensure that all OVCs have equitable access to social protection interventions to secure their rights to social security which include the right to health, education, adequate housing, sanitation, access to clean and safe water in harmony with the provisions of Article 43 of the constitution. Deliberate efforts should be taken to increase OVC access to feeding programs especially at ECDE, expanding investments in community libraries and strengthening access and increase targeting and coverage of the OVC cash transfer programs in the county.

Severe Shocks to 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 shock in the county was large rise in price of food which affected 21.1 per cent of county residents followed by droughts or floods and dearth of family member which affected 15 per cent and 13 per cent of the households, respectively. Other major shocks in the county include Loss of salaried employment or non-payment of salary, Household business failure and Severe water shortage which affected 8.3 per cent, 6.2 per cent and 5 per cent of county residents, 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	15
Crop disease or crop pests	2.1
Livestock died	6
Livestock were stolen	0.9
Household business failure, nonagricultural	6.2
Loss of salaried employment or non-payment of salary	8.3
End of regular assistance, aid, or remittances from outside the household	0.3
Large fall in sale prices for crops	0
Large rise in price of food	21.1
Large rise in agricultural input prices	0
Severe water shortage	5
Birth in the household	1
Death of household head	3
Death of working member of household	1
Death of other family Member	13
Break-up of the household	2
Bread winner jailed	-
Fire	1
Robbery / Burglary / Assault	2
Carjacking	-
Dwelling damaged, destroyed	1
Eviction	1
Ethnic/ Clan Clashes	-
Conflict	2
HIV/ AIDS	1
Other	7
Number of households with Shock ('000)	203

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, 37 per cent of the households received cash transfers. A higher proportion of households received transfers from within the country (76%), mainly from individuals (73%) while external transfers constituted 39 per cent.

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

		Beneficiaries
	Total Number of Households	326,000
	<i>Households receiving transfers (%)</i>	<i>37</i>
From Inside Kenya	Individual	36,106
	Non Profit Institution	-
	National Government	1,074
	County Government	629
	Corporate Sector	-
Inside Kenya		37,808
Outside Kenya		1,786
Total		38,036
Number of households that received transfers		120,000

Source: KIHBS, 2015/16

The County has a total of 43 charity children's institutions. Out of these 5 are found in Kilifi North, 23 in Kilifi South and 14 in Malindi. There is one fully functional child protection center located in Malindi. The second one is being constructed with financial support from Plan International –Kenya. One correctional rehabilitation center has been established at Malindi to serve as a prison for the underage. Child desks have also been established at Kilifi and Malindi Police Stations to address issues related to the protection of the child. Strengthening child related services by enhancing the institutional capacities, investing in rescue, correctional and child protection centers and establishing of child desks in all police stations are important for securing the protection of the child in the county.

The government of Kenya has earmarked Ksh 10 billion in form of cash transfers for social protection for the elderly, orphans and vulnerable during this period, there is need to consider the youths and women who have been rendered jobless. The county government is providing nutritional supplements to over 4000 mothers and malnourished children in the informal settlements most of whom lost their jobs out of the pandemic. The county in partnership with the non-governmental organizations specifically Self-Help Africa has focuses on transforming small holders' farmers from subsistence to commercial production most of whom are women.

The county has a relatively smaller number of elderly persons aged from 65 years and above. These people have no access to sources of income, hence can't meet both basic food requirements and non-food items, implying that they live in poor conditions due to poverty. Article 43 of the Constitution of Kenya 2010 confers to every person the right to social

security including the right to health care, sanitation, accessible and adequate housing, adequate food and clean and safe water in adequate quantities. This therefore binds state agencies to provide social protection interventions through either non-conditional or conditional cash transfer with a view of enhancing the welfare of the elderly persons and other people who are exposed to myriad of vulnerabilities. There are two main social net programs in the county, one target to provide cash transfers to elderly persons and cash transfers to Orphans and Other Vulnerable children (OVCs). The ultimate objective of these cash transfers is to enhance the social and economic welfare of the targets groups while reducing the effects of poverty on their livelihoods. Therefore, deliberate efforts should be taken to increase the coverage of both programs to ensure that more legible persons benefit. Increase access to OVC feeding programs especially at ECDE level and quality health care, strengthening the administrative, institutional, and human and M&E capacity is paramount to ensure smooth operation of the two programs while maximizing on development effectiveness, outcomes and impacts.

Most of the social protection operations were undertaken through noncontributory 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. Potential sources for revenue were adversely affected by the floods and COVID-19. However, through lifting of up restrictions and the measures taken by the county on local business is picking up which would eventually revive the revenue stream though it might take time but there are positive signs to that effect. County support to the Small and Medium Enterprises and different business industries within the county will help revive the revenue base. Financial support from the national government was crucial in facing the pandemic.

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. 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.

The tourism industry is one of the most important industries in the county. A large per cent of the residents in the county derive their source of livelihood from tourism. With the onset of the COVID-19 pandemic, the county experienced a reduction in tourist arrivals due to imposed travel restrictions. As a result, the 11 star-rated tourist hotels in the county were a significant decline in performance during the year, since foreign tourists, who are the main clients postponed their travel plans. The decline in tourist receipts to the county economy in 2020 was estimated at over Ksh 3 billion¹², which includes hotel revenues, lost employment benefits, tours and travel and earnings by other tourism value chain players.

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

Lack of comprehensive social protection at the county level exposing the county residents to sufferings such as lack of food and treatment. 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, counseling 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.

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 county government to:

- i. Ensure continued/scaled up and coordinated delivery capacities of social protection and humanitarian crisis response programmes.
- ii. Ensure that all OVCs have equitable access to social protection interventions so as

¹² Assuming that average length of stay per tourist is 4 days, spending at least KSh.10,000 per day.

to secure their rights to social security which include the right to health, education, adequate housing, sanitation, access to clean and safe water in harmony with the provisions of Article 43 of the constitution.

- iii. Mobilize substantial domestic and international financing to protect and enhance fiscal space for health and social protection in the county.
- iv. Strengthening child related services by enhancing the institutional capacities, investing in rescue, correctional and child protection centers and establishing of child desks in all police stations are important for securing the protection of the child in the county.

12. Labour Participation

12.1 Characteristics of the Sector

Tourism and fishing are the main economic activities in the county. This is due to her proximity to the Indian Ocean which is good for fishing and tourist attraction. The county boasts of the best beaches and popular resorts and hotels. The pandemic has affected the industry as demand from the hospitality, restaurant and catering sector represents a significant share of fish consumption in the county. The closure of restaurants and cancellation of both public and private events resulted into a collapse in demand for these fish products and reduced markets hence affecting the livelihood of sellers. The loss of domestic demand of fish had often been further heightened by a collapse in export markets. Strategies to flatten the COVID-19 curve such as, social distancing, stay-at-home orders, travel and mobility restrictions have resulted in temporary closure of many hospitality businesses in the county and significantly decreased the demand for hotels that were allowed to continue to operate under the COVID-19 rules. All these had a negative impact on the livelihood of workers who used to work in hospitality industry.

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

	Male	Female	Total
Population	595,251	645,404	1,240,674
Working	248,163	286,248	534,420
Seeking Work/ No Work Available	45,327	31,884	77,211
Persons outside the Labour Force	301,654	327,145	628,808
Not Stated	107	127	235
<i>% Working</i>	<i>84.5</i>	<i>89.9</i>	<i>87.3</i>
<i>% Seeking Work/ No Work Available</i>	<i>15.4</i>	<i>10.0</i>	<i>12.6</i>

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 611,631 people of whom 534,420 people were working and 77,211 were seeking work but work was not available representing an unemployment rate of 12.6 per cent. With the pandemic unemployment rate increased (Kenya Population and Housing Census, 2019). The unemployment rate has increased during the period of COVID-19, according to May 2020 KNBS COVID_19 Survey, found that 21.6 per cent of the county labour force worked at least for 1 hour for pay; and 77.9 per cent of the employees worked with no pay. 19.4 per cent of employees were absent from work due to COVID-19. On average, workers in the County lost 6.7 hours per week due to 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. In addition, the reduction in operation hours and restriction on movement in and outside Nairobi and Mombasa County had negatively impacted on the transport sector with many relying on it rendered jobless. 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. The impacts of the pandemic were also felt on the service sectors as it affected workers in both private and public sector with several people working in restaurants and bars being left jobless due closure as ordered by the government.

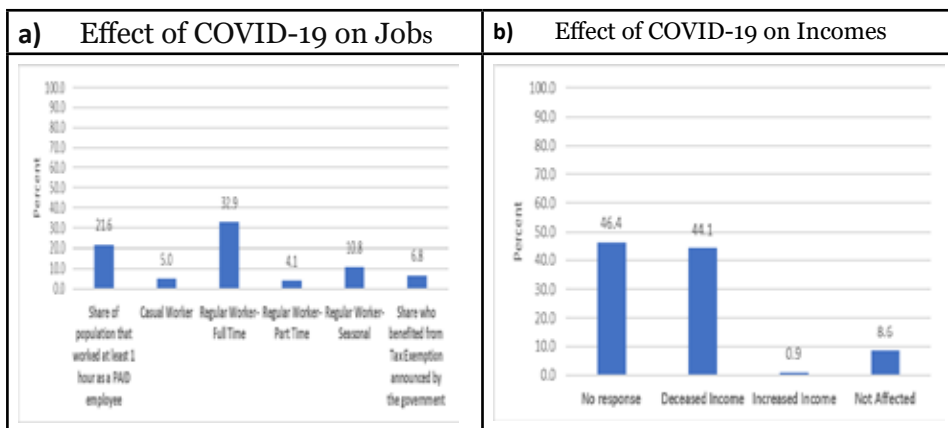
In education sector the workers employed by school Board of management (BOM) loosed their jobs as well as those employed by Private schools as the schools could not sustain their salaries due to closure of schools. Public schools have also faced challenges in making payment for the other expenses such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

Effects of COVID-19

During the pandemic, about 5.0 per cent of workers in the county were casual workers 32.9 per cent were regular workers (full time), 4.1 per cent employees were working as part time. However, about 44.1 per cent of workers reported decrease in income while only 0.9 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 6.8 per cent of workers indicated to have benefited from government tax exemptions which indicates about 93 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.

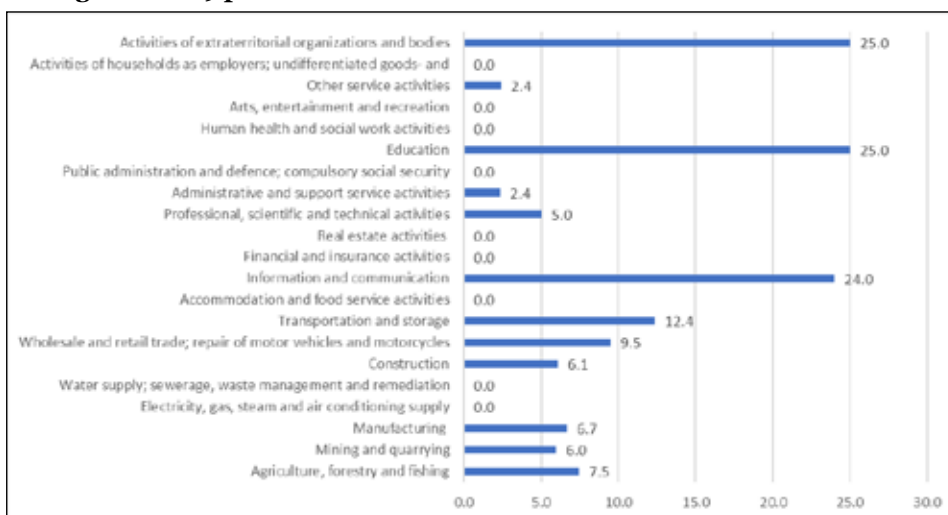
Figure 12.1: Effects of COVID-19, 2020



Source: May 2020 KNBS COVID-19 Survey

In Kilifi County, the COVID-19 had varied effects across sectors. These including disruption of education, markets and transports services. According to the May 2020 KNBS COVID_19 Survey, the activities of extraterritorial organizations and bodies sector reported the highest level of loss of hours worked per week (25.0 hours) followed by information and communication which lost 24.0 hours (figure 64). Workers in transportation and storage and wholesale and retail trade; repair of motor vehicles and motorcycle lost a total of 12.4 hours per week and 9.4 hours per week, respectively. Workers in agriculture, forestry and fishing and manufacturing recorded on average loss of 7.5 hours and 6.7 hours per week, respectively.

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



Data Source: KNBS COVID-19 Survey, 2020

Majority of the workers in the public sector were encouraged to work from home while workers from the private sector were given unpaid leave due to reduced activities at workplace as a result of implementing strict health guidelines. About 77.9 per cent of the employees reported to have worked with no pay including the self-employed and those working in hotels. Following the containment measures put in place by both national and county governments, some businesses such as bars, hotels, market centres totally closed, leading to reduced business activities. Workers in the transport sector were also rendered jobless due to restrictions of moving in and out of Nairobi and Mombasa counties. Quarry workers and hawkers were not spared either. As a result, majority of workers (44%) reported decrease in income due to the COVID-19. The water sector indicated no loss in working hours because water was essential in mitigating the spread of the pandemic.

12.2 Opportunities with COVID-19 in Labour Participation

The county government have been provided with the opportunity to 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. 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.

The pandemic strengthened the regional unity as the counties looked forward in the fight against corona pandemic and exploitation of the economic potential. The disease has also exposed lack of preparedness among counties in terms of responding to the emergencies such as COVID-19 pandemic. It has also 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. Lack of comprehensive social protection at the county level exposing the county residents to sufferings such as lack of food and treatment.

ICT was critical and had enabled the county programs to run smoothly since the pandemic and provided an opportunity for exploitation for adequate internet coverage especially to the education sector.

The pandemic has provided opportunity for county government to invest more money in training health workers. The economic block can serve as a market for the locally produced goods, hence creating more employments.

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.

County is not well prepared in terms of response to health-related risks such as the current COVID-19. Opportunities within the Jumuiya ya Pwani regional economic block needs to be exploited to enhance economic competitive advantage. There are emerging talents among the youths which can be tapped to benefit the county especially this time of COVID-19 such as making of ICU bed, masks and PPEs.

12.4 Recommendations

- (i) Build strong human capital, through continued improvement in health, increased school enrollment, reduced mortality rate and reducing unemployment rate.
- (ii) Design and implement an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 control restrictions. The emergency fund, supported by development partners and other stakeholders, will include identification and support for the most vulnerable businesses and entrepreneurs affected by COVID-19. The key interventions in revamping businesses will include providing essential goods and services, dealing in products and services that have high demand and potential of employing large number(s) of people.
- (iii) Create more employment opportunities through investment in education and training and skills development; and investments within the key sectors of Tourism, agriculture, technology and innovation.
- (iv) Invest in community and primary health including community health workers, water, sanitation, immunization and public health.
- (v) Build workplace resilience to public health emergencies and outbreaks of infectious diseases in all economic sectors.
- (vi) Offer more training to the county residents on Entrepreneurship so to have successful businesses.

13. Conclusion and Key Recommendations

13.1 Conclusion

Fiscal policy

The total county revenue grew by 111 percent from Ksh 6.42 billion in 2013/14 to Ksh 13.61 billion in 2020/21, an average annual growth rate of, 15.86 per cent. Similarly, actual expenditure in the county increased from Ksh 4,013.1 million to Ksh 11,873.0 million in 2020/21, translating to an average annual growth rate of 14.23 per cent. 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. Pending bills in Kilifi County generally follow an upward trend. In 2014/15 the county reported Ksh 269.3 million in pending bills. This increased to Ksh 1,546.4 million in 2015/16 with development related pending bills accounting for 75.9 per cent of this. Pending bills declined to Ksh 819.8 million in 2016/17 then ascended to Ksh 1,224.7 million in 2017/18 before decelerating to Ksh 1,141.0 million in 2018/19. At the end of 2020/21 pending bills amounted to Ksh 1,988.0. Generally, pending bills related to development have been greater than those related to recurrent expenditure on average accounting for 55.8 per cent of the pending bills portfolio over the review period. If pending bills for development were paid in their respective fiscal year, the execution of development budget in subsequent years would improve.

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. 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 marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services; pests and livestock diseases; farm losses and post-harvest waste; poor and inadequate infrastructure; 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, as well as access to piped water for urban and peri-urban households. Sanitation coverage remain low in the county with majority of households having no toilet facility thus relieving themselves in the bush. Similarly access to piped sewer remains low. This presents an opportunity for the county to increase sanitation coverage to increase its additional revenue collection from sanitation services. Similarly, increased access to piped water by rural and peri-urban households can also be potential for revenue.

Manufacturing, Trade and MSMEs

The momentum of 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 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 PSV matatus. The paved County Road network covers 38.2 km, while the paved National roads cover 318.33 km. Out of the total paved road network of 356.53 km, 74.1 per cent is in good condition, 23.3 per cent in fair condition and 2.3 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, lack of knowledge and skills on internet and the high cost of services are the leading reasons that the people of in the County do not have internet connection. The housing tenure is predominantly owner occupied at 66.9 per cent, with 33.0 per cent of the households under rental tenure. Majority of the households (92.0%) did not receive a waiver or relief on payment of rent from the landlord, despite inability to pay due to the pandemic.

In addressing the emerging challenges, the county to integrate sea-based transport with land-based transport to create multi-modal transport systems; Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund as a “last resort” in providing ICT access in remote areas where market forces fail to expand access; and integrate the blue economy in spatial planning for human settlements and urban areas along the Indian Ocean with the objective to balance sea-based and land-based activities livelihoods.

Tourism

Annually, the county receives around 150,000 tourists, some of whom are accommodated in the over 378 registered facilities with an estimated bed capacity of 12,085. Out of these hotels there are 11 star-rated hotels with a total capacity of 739 rooms and 1495 beds. There are 367 other unclassified accommodation facilities accounting for 91.5 per cent of the bed capacity, that include Hotels, Villas, Cottages, lodges and Guest houses. Accommodation and food services contributes only 1.2 per cent of the total GCP despite the county's rich

endowment in hospitality infrastructure. The county government planned to allocate Ksh 4.018 million of the proposed Ksh 392,026 million (1.02%) to tourism development and promotion during the 2018-2022 planning period. This is meagre in relation to the strategic importance of tourism to the county economy.

Health

COVID-19 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 with support from stakeholders would continue investing in early childhood development through infrastructural development; 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

It is 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.

Labour Participation

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 will 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

In order 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. 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.

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 step gap measure against COVID-19.

Manufacturing, Trade and MSMEs

In sustaining growth in the Manufacturing, Trade and MSMEs sector, the County to: Establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, 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; Install fish processing plants, cold storage facilities and ice plants as planned in the third Medium Term Plan; Develop Programme for fisheries and maritime infrastructure, for instance, construction of fish ports in collaboration with the national government as provided for in MTP III; Revive cotton industries/cottages in the County; Develop cottage industries and industrial processing for Cassava, rice, maize, banana, Mango, Cashew nut, Coconut, Citrus and high value horticultural products; Strengthen existing cottage industries in the County for product value addition and processing; Develop and Promote Public Private Partnership for agro-based industries in Kilifi; Collaborate with KEBS to capacity build farmers on the required standards for their products, that is, strengthening community led product processing plants/cottage industries; and Revive closed industries like the Kilifi cashew nuts and the Mariakani dairy cooperative.

Infrastructure, housing and urban development

In addressing the emerging challenges, the county to integrate sea-based transport with land-based transport to create multi-modal transport systems; Collaborate with the

Communications Authority and telecom service providers to utilize the Universal Service Fund as a “last resort” in providing ICT access in remote areas where market forces fail to expand access; and integrate the blue economy in spatial planning for human settlements and urban areas along the Indian Ocean with the objective to balance sea-based and land-based activities livelihoods.

Tourism

Re-engineering the tourism sector in Kilifi County to include optimization of existing tourist attraction sites for maximum benefits; preserving and conservation of historic and cultural tourist attraction sites; explore new tourist attraction sites; promoting production of basic requirement in hospitality sector.

Health

For a resilient health sector, there is need to create 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 to continue investing in early childhood development through infrastructural development; deployment of ECDE teachers and provision of sanitation facilities. The county would put up measures that encourage learners to complete all levels of education.

Social Protection

COVID-19 pandemic created immediate and long-term economic consequences for vulnerable groups including children, PWDs, elderly and their families. In an effort to strengthen social protection response in face of a similar pandemic, the county government will 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 is important for the County to promote implementation of a stronger labour market interventions especially those working tea sector which is a major employer in the county and policy reforms that drive employment creation. The County to deepen technical education, training and skills development.