

Socio-Economic Status of Vihiga County with COVID-19

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**Kenya Institute for Public Policy
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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's main revenue sources comprise of the transfers from the National Government, Conditional Grants, and its own source revenue (OSR). Budget execution as measured by absorption rate has largely remained above 60 per cent over the review period. Average overall absorption rate stands at 72.4 per cent. Average development budget absorption rate stands at 51.0 per cent while that of recurrent expenditure stands at 84.5 per cent. Pending bills have been declining over the review period but remain high with average development related pending bills accounting for 53.6 per cent of pending bills. County wage bill has been growing tremendously at the expense of development expenditure. Between fiscal years 2013/14 and 2020/21 county wage bill was on an upward trend and on average accounted for 46.0 per cent of expenditure, while development expenditure has been plummeting on average accounting for 25.6 of total county spending. Priority expenditure has been on non-administrative and non-coordinational functions such as health, education, agriculture, roads etc., accounting for an average of 59.9 per cent of actual expenditure. Health sector leads at 25.4 per cent. Administrative and coordinational functions such as county executive, county assembly, public service management and finance account for 40.1 per cent of expenditure. There is need to mobilize more finances from OSR to increase the available revenues for budgetary operations. Seek for more funding in form of grants from development partners to cater for the critical development projects in the county. Ensure that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers.

Agriculture, Livestock and Fisheries

Crop and livestock farming in Vihiga County account for a significant share of the County's economic activity. Farming in the County is dominated by subsistent, small-scale farmers. Key agricultural value chain commodities in the County include: - maize, beans, bananas, sweet potatoes, kales, cassava and sugarcane, avocado, mangoes, cattle, sheep, goats, poultry, pigs and aquaculture. 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; land fragmentation; low agro-processing and value addition opportunities; low access to quality and affordable inputs; low crops, livestock, and livestock products marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services; and pests and livestock diseases; and farm losses and post-harvest waste. To successfully build resilience and enhance growth of the agriculture sector, the County will: explore partnerships to develop agro-processing and value addition capacities at the County; link farmers to diverse

product markets; Strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural inputs and services and build their technical capacity to act on information obtained; provision of storage and cooling facilities; and strengthen agricultural cooperatives.

Water Sanitation and Hygiene (WASH)

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

Manufacturing, Trade and MSMEs

The momentum in manufacturing, trade and MSMEs was disrupted by the COVID-19 pandemic as the containment measures associated with COVID-19 pandemic took a heavy toll on the sector. The measures that were taken, such as closure of markets, observance of health protocols in form of social distancing and handwashing served to increase the cost of production and affected access to markets for the produce. In sustaining growth in the Manufacturing, Trade and MSMEs sector, the County will: Collaborate with National government to establish a granite processing plant in the county as per the Third Medium Term Plan 2018-2022 flagship programmes and projects of enhancing mining for development; Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify, and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Related, the County will inject some stimulus to cushion the businesses and traders through affordable credit; waiver of some County taxes, cess, and other charges; 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; and adopt the new pandemic guidelines including rearranging floor plans to allow for social distancing and maintain high standards of hygiene through having hand washing facilities in manufacturing establishments.

Infrastructure, housing, and urban development

The main means of transport used in the County is motorbike 40.08 per cent, followed by PSV matatus at 28.75 per cent. The paved County Road network covers 27.15 KMs, while the paved National roads cover 125.31KMs. Out of the total paved road network of 152.46KMs, 49.42 per cent is in good condition, 42.37 per cent in fair condition and 8.2 per cent in poor condition. The status of ICT access and use in the county is low, especially among households. The housing tenure is predominantly owner occupied. The county has challenges in quality of the housing stock. Approximately 31.9 per cent of houses are constructed using finished materials for walls, floor, and roofing, compared to 68.1 per cent constructed using rudimentary materials.

In response to the challenges, it recommended that the county to; Apply labor based and local resource-based approaches for road development and maintenance, where technically and economically feasible, in line with the Roads 2000 national policy; Speed up the construction of fiber-optic broadband networks in underdeveloped areas; and Fastrack implementation of the affordable housing programme with a focus on improving living conditions and building quality applying finished materials for walls, floors and roofing.

Tourism

The main tourist attractions in Vihiga County include nature-based tourism, cultural and heritage tourism, Agro-tourism and ecotourism and medical tourism. There are no star-rated hotel facilities in Vihiga County. However, there are 7 registered hotels that are easily accessible and distributed across the county. There is great opportunity to invest in luxury hotels to tap into the high-end tourist market, and campsites to target backpackers and adventure tourists. There is need to enforce high sanitation standards at tourism accommodation and attraction sites; sanitation is emerging as a key component in ensuring business continuity in the tourism sector. Accommodation facilities that will meet the re-opening measures for hospitality sector are likely to recover faster from the effects of the pandemic, since tourist – both domestic and foreign – will be concerned about their safety (in terms of contracting the pandemic) first.

Health

The county has one public county referral facility, Vihiga County Hospital at Mbale. There are three level 4 facilities 18 health centers, 32 dispensaries and 34 private and mission-based facilities. The average distance to the nearest facility is 5 Km. The county doctor to population ratio is 1:10,000 in 2017 against the national doctors to population of 1:16,520. This ratio steadily improved to 1: 8000 in 2020 and 1: 6000 in 2021 with the recent recruitment of health workers. On the other hand the county nurse to population ratio has improved from 1:1500 in 2017 and to 1: 1500 in 2019. The National Hospital Insurance Fund (NHIF) was the leading health insurance provider reported by 94.8 per cent of the population. About 24.8 per cent of children were delivered at home which is below the national percentage of 31.3 per cent. The proportion of children born in hospitals, health

centres, and dispensary/clinics was 42.9 per cent, 22 per cent, and 6.9 per cent respectively. The county had 57.3 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 8.1 per cent were fully immunized against measles at 18 months. There is need for more awareness on immunization so that mothers can ensure their children get immunized. Implement a comprehensive human resource health management system including undertaking training needs assessments and information system to ensure skilled and motivated health care workers, equitably 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 number of early childhood centres was 852, primary schools was 475, secondary schools 157, adult learning centres 107 and technical and vocational training centres 31 in 2007. During the same period, KMTC and Kaimosi University Colleges were established at Mbale and Kaimosi respectively adding to the existing tertiary colleges, namely Ebunangwe University Campus, Friends Kaimosi Institute of Technology, Vihiga, St Joseph's, Goibei and Kaimosi Teachers Colleges. The Gross Attendance Rate (GAR) for pre-primary school was 90.9 per cent while that of primary school and secondary school was 112.9 and 75.3 per cent respectively in 2015/16. The County with support from stakeholders would continue to invest in early childhood development through infrastructural development to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities. The county to provide financial or in-kind support, such as school feeding, to help families overcome the increased costs of attending school and provide psychosocial support to teachers and learners during and after the pandemic.

Social protection

The County has an estimated number of 20,000 PWDs (3.8 per cent) and 7.5 per cent older persons aged 65 years and above as shown in table 67 below. Overall poverty levels in the county are at 76 per cent, while 36 per cent and 43 per cent of the population is multidimensionally and food poor. The proportion of stunted children in the county is 24 per cent of the total population. The county has in place an ongoing programme to provide daily animals to vulnerable groups. So far provided 38 daily cattle / goats. It will be important for the County to build linkages with other Ministries, and with NGOs that work with vulnerable groups to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training. Undertake research to get a better understanding of the actual situation of disability and chronic illness in the County, and to map existing initiatives on social protection.

Labour Participation

The major Economic Activities that drive Vihiga Economy are Cottage Industries, Subsistence Farming, Tea Farming, Horticulture, Livestock Farming, Wholesale and Retail Trade, Quarrying and Mining. Drivers of industrialization in Vihiga County include Strategic location, raw materials, existing infrastructure and regional markets. Industrial potential exists in agro-industrial processing, Meat and dairy and sanitary products. These investments can be supported through additional investments in green energy and business

development services for private sector facilitation into industrial zones. The county needs 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 needs to protect workers in the informal economy by pursuing innovative policies including of non-contributory and contributory social security schemes and facilitate transition to the formal economy in the longer term.



1. Introduction and Structure of County Economy

1.1 Introduction

Vihiga County is one of the counties in the Lake Region Economic Bloc (LREB). The county occupies a land area of 531 km². The county had an estimated population of 590,013 people of which 48.0 per cent were male and 51.9 per cent female (KNBS, 2019) as indicated in table 1. Of the population 20,000 (3.8 per cent) are persons with disability. The youth constituted 31.0 per cent of the population of whom 52.0 per cent were female. The county has a population density of 1,111 per km². About 90.0 per cent of the population live in rural areas of whom 51.9 per cent are female. The elderly population (aged 65 year and above) make up 7.5 per cent of the total population of whom 56.0 per cent were female. The population in school going age group (4-22 years) was 47.7 per cent in 2019.

In 2015/2016, the overall poverty rate in Vihiga County was 43.0 cent against the national poverty rate of 36.1 per cent. In addition, 36.3 per cent of the population were living in food poverty and 76.1 per cent were living in multidimensional poverty, that means being deprived in several dimensions including health care, nutrition, and adequate food, drinking water, sanitation and hygiene, education, knowledge of health and nutrition, housing and standard of living, and access to information. According to KDHS 2014, 23.5 per cent of the children were stunted as compared to the average national level at 26.1 per cent.

Table 1.1: Development indicators in Vihiga County

	County		National
Estimated County Population (KNBS, 2019)	590,013		1.1 per cent of total population
Males	286,678		48.0%
Females	306,323		51.9%
Intersex	18		0.002%
Estimated Population Density (km ²)	1,111		82
Persons with disability	20,000		2.2
Population living in rural areas (%)	90.0%		68.8%
Children (0-14 years) (%)	41.5%	41.1%	
School going age (4-22 years) (%)	47.7%		68.7%
Youth 15-34 years (%)	31.0%		36.1%
Labour force (15-64 years) (%)	51.4%	55.0%	

Elderly population (over 65-year-old)	7.5%	3.9%
Poverty (2015/2016) (%)	43.0%	36.1%
Food Poverty (2015/2016) (per cent)	36.3%	31.9%
Multidimensional Poverty (2015/2016) (%)	76.1%	56.1%
Stunted children (KDHS 2014)	23.5%	26%
Gross County Product (Ksh million) 2020	85,407	0.8% share to total GDP
Average growth of Nominal GCP/GDP (2013-2017) (%)	18.1%	104.3%

Data Source: KNBS (2021)

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 182,932 individuals. They are followed by persons aged between 6-13 years who are the primary school children comprising of 134,724 of the county population. The under 0-3 age comprise of 50,778 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	25,135	25,643	50,778
Preprimary school age (Under 4-5)	14,195	13,883	28,078
Primary School Age (6 -13)	66,831	67,893	134,724
Secondary school age (14-17)	32,827	32,372	65,199
Youth Population (15-34)	87,933	94,999	182,932
Female Reproductive age (15-49)		134,594	134,594
Labour force (15-64)	149,561	165,715	165,715
Aged Population 65+	19,508	24,787	44,295

Data Source: KNBS (2019)

1.2 Level of socioeconomic deprivations

In 2015/2016, 24.3 per cent of the population had health insurance cover, 4.4 per cent lived in premises with water, 88 per cent lived in their own homes and 54.2 per cent had access to mobile telephone (Table 1.3) and majority of the households (99.5%) had access to toilet facility. As a result, the multi-dimensional poverty is estimated at 76.1 per cent.

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

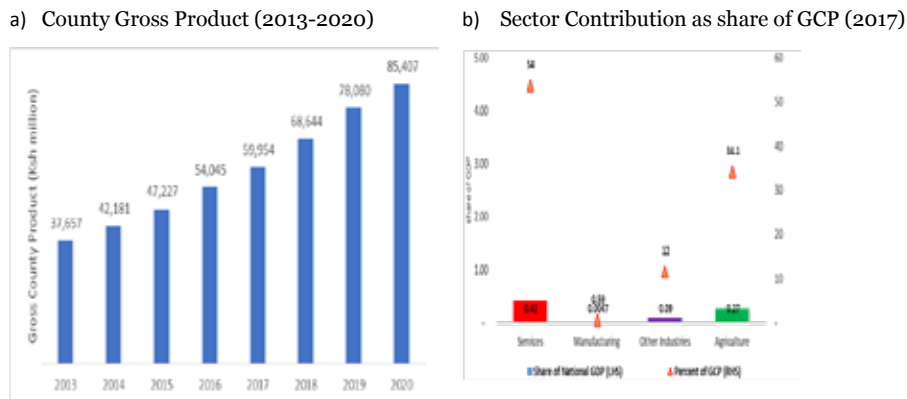
Indicator	Details	Percentage Distribution (%)
Health care	Population with Health Insurance Cover	14.3
Drinking water (Time taken to fetch)	Zero (In premises)	4.4
	less than 30 minutes	89.4
	30 minutes or longer	6.2
Sanitation and Hygiene	Proportion of households with toilet facility	99.5
	Shared Toilet	44.8
	Not Shared	55.2
	Place to wash hands outside toilet facility	15.7
	No place to wash hands outside toilet facility	84.3
Education (Population 3 years and Above by School Attendance Status)	Ever Attended	94.6
	Never Attended	5.3
Knowledge of health and nutrition (children aged 0-59 months that participated in Community Nutrition Programmes)	Participated in Community Nutrition Programmes	3.5
	Did not Participated in Community Nutrition Programmes	93.3
Housing and standard of living (house ownership)	Owner Occupier	88
	Pays Rent/ Lease	8
Access to information (Population Aged 3 years and above by ICT Equipment and Services Used)	Television	24.2
	Radio	68.7
	Mobile phone	54.2
	Computer	4.3
	Internet	9.6

Source: KIHBS 2015/16

1.2 Structure of Vihiga County Economy

Vihiga County Gross County Product (GCP) accounted for 0.8 per cent of total Gross Domestic Product (GDP) between 2013 and 2020 to as shown in Table 1.1. The GCP increased from Ksh 37,657 million in 2013 to Ksh. 85,407 million in 2020 representing an annual average growth rate of 18.1 per cent. The service sector contributes 54.0 per cent of GCP while agriculture, manufacturing and other industries sector share constituted 34.1 per cent, 0.59 per cent and 12.0 per cent, respectively. The services sector includes such activities as wholesale and retail trade. Agriculture is mainly dominated by crop farming while industries and manufacturing include small scale production of consumer goods such as food processing.

Figure 1.1: Structure of the county economy, 2013-2017



Source: KNBS (2021)

1.3 COVID-19 Caseload and Implications of Mobility Restrictions

As of March 2020, Vihiga County had zero cases. However, by August 2020, the County had reported 11 COVID-19 cases with mobility stringency of 70.4. The caseload would rise to 611 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.

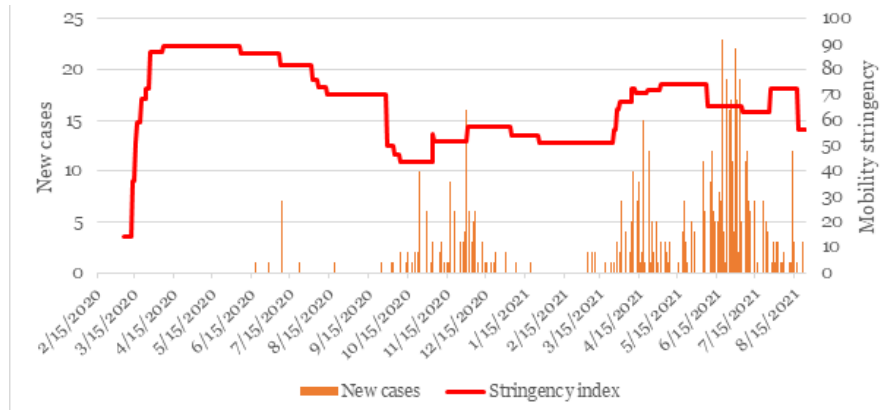
Table 1.4: Total COVID-19 cases and mobility stringency— Vihiga County

Date	Total cases	Mobility stringency (0-100)
13 th March 2020	0	36.1
23 rd August 2020	11	70.4
23 rd August 2021	611	56.0

Data Source: Oxford University

New COVID-19 cases in Vihiga County were highest between September 2020-December 2020 and March 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.

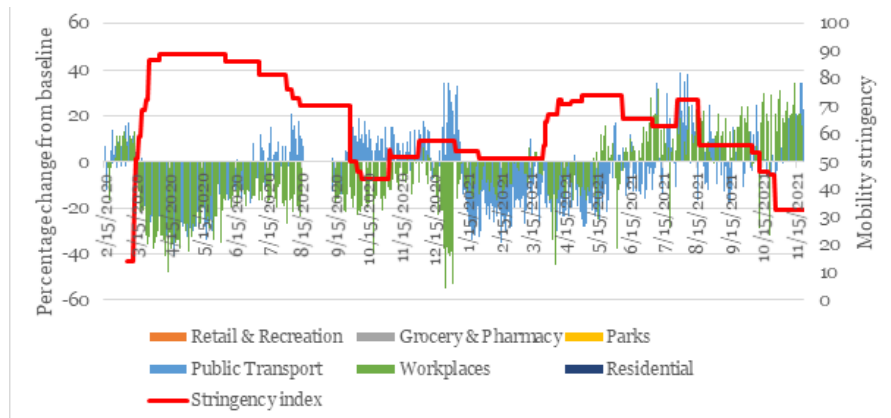
Figure 1.2: Vihiga County New COVID-19 cases and the National Mobility Stringency



Data Source: Oxford University

Public transport and workspaces have been the most responsive to COVID-19 mobility restrictions in Vihiga County. The performance of the sub-sectors has been affected negatively by tighter mobility restrictions and positively by less stringent mobility restrictions.

Figure 1.3: Effect of COVID-19 on Vihiga Economic performance and the National Mobility Stringency



Data Source: Oxford University

The broad objective of the report is to analyze the socio-economic effects of COVID-19 across sectors and propose interventions for mitigating the effects. The report is organized as follows. Chapter 2 focuses on fiscal policy, 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

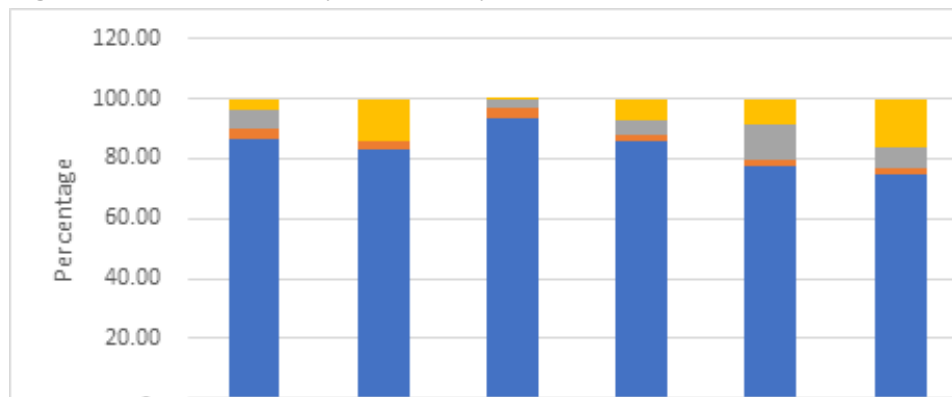
County revenues are critical for enabling the county government to undertake its development projects and finance its recurrent expenditure. The County's main revenue sources comprise of the transfers from the National Government, Conditional Grants and its own source revenue (OSR).

Transfers from National Government

Total County revenue has significantly grown by 69 per cent from Ksh 3.28 billion in 2013/14 to Ksh 5.54 billion in 2020/21. The amount received in 2020/21 accounted for 84.2 per cent of the annual budget allocation of Ksh 6.58 billion for the County. The performance was an improvement from the 75 per cent of the budget allocation attained in 2019/20, supported by improved OSR collections and 100 per cent disbursement of equitable share from the National Government.

Analysis of the sources of revenue indicate that equitable share has been the main source of county funding accounting for more than 75 per cent of the total revenues (Figure 2.1). On average, it contributed 81.82 per cent of the total revenues between 2013/14 and 2020/21. Equitable share similarly has been growing over the years. It grew by 64 per cent from Ksh 2.83 billion in 2013/14 to Ksh 4.65 billion in 2020/21. The amount received in 2020/21 accounted for 100 per cent of the annual budget allocation. This implied that the County received all expected amount from the National Government, underscoring its commitment to support county operations through timely financing.

Figure 2.1: Share of county revenues by source



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

Analysis of monthly cash transfers from the National government to Vihiga County indicate an increasing trend from January to June over the years as shown in table 2.1 A similar trend was observed in 2020 with the transfers growing by 183.02 per cent between from Ksh. 1.7 billion in January to Ksh. 4.83 billion in June. In comparison to 2019, the total amount transferred to Siaya County in March, April, May and June of 2020 declined by 3.86 per cent from Ksh 14.93 billion to Ksh 14.35 billion. In general, the months of January to June 2020 recorded lower transfers from the National Government in comparison to the same period in 2019. Owing to the COVID-19 pandemic that greatly hampered economic activities and the business environment, coupled with the ensuing decline in OSR, it is important that the National Government increase the transfers to the county to facilitate implementation of various planned projects as well as necessary measures meant to curb the spread of Corona Virus.

Table 2.1: Share of county revenues by source

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
2021	2,227.02	2,712.13	-	-	-	-	1,266.84	-	-
2020	1,707.89	2,213.30	2,701.81	3,172.93	3,650.13	4,833.83	1,167.79	1,634.72	1,810.17
2019	2,104.54	2,479.97	2,910.95	3,353.76	3,760.47	4,910.04	3,760.47	1,201.74	1,667.37
2018	1,467.28	1,933.71	2,337.05	2,689.79	3,144.63	4,596.49	553.15	961.83	1,658.66
2017	-	-	2,819.68	3,153.86	3,516.02	4,184.39	617.29	-	-
2016	-	-	2,620.29	2,930.00	3,568.78	3,568.78	-	-	-

Data source: Gazette Notice (Various issues)

Conditional grants

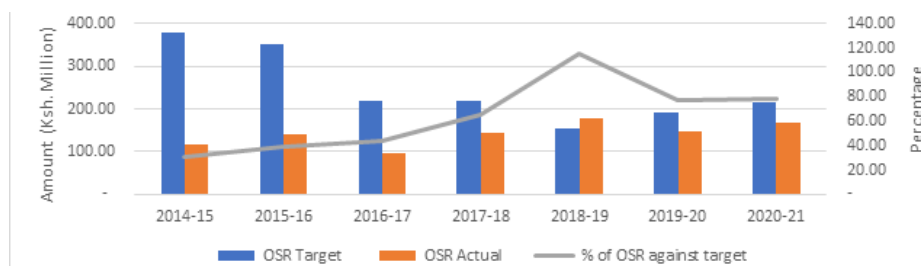
Conditional grants continue to be a major source of revenue for financing county operations and has been growing over the years. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA), and Sweden. During 2020/21, the County received Ksh 134.43 million and Ksh 582.14 million from National Government and Development partners respectively. The contribution of condition grants to total revenue has been robust. On average, the grants contributed 7.56 per cent of the County total revenue between 2013/14 to 2020/21. In nominal terms, conditional grants have been on an upward trajectory and grew by 265 per cent from Ksh 196.97 million in 2013/14 to Ksh 719.57 million in the 2020/21. During 2019/20, the county received the highest amount of conditional grants totalling to Ksh 816.14 million. The significant growth underscores the potential the County has in raising more revenue through grants. As a result, there is need for the County to maintain good relations and comply fully to the requirements of its development partners to continue benefiting from the finances.

Own Source Revenue

The share of OSR to total revenue indicate a fluctuating trend, averaging 3.41 per cent between 2013/14 and 2020/21 (figure 2.1). During 2020/21, OSR contributed 3.05 per cent of the total revenues, a decrease from 7.69 per cent registered in 2019/20. Notwithstanding the low contribution, analysis of annual County OSR performance shows an increasing trend over the financial years (Figure 2.2). The county registered a growth of 46 per cent

from Ksh 115.94 million realized in 2014/15 to Ksh 169.11 million collected in 2020/21. The ratio of OSR target versus the actual collection shows a similar trend growing from 30.69 per cent in 2014/15 to 115.33 per cent in 2018/19. This implies that the County has made significant efforts in mobilizing the collection of OSR. During 2019/20, the county generated Ksh 148.20 million from OSR, a 16.38 per cent decline compared to Ksh 177.23 million collected during 2018/19. The decline was premised on the adverse effects of the pandemic that slowed down economic activities. In 2020/21, the County generated Ksh 169.11 million as OSR, representing an increase of 14.1 per cent compared to the amount realized in 2019/20. The improved performance is partly attributable to the recovery of economic activities due to the ease of containment measures.

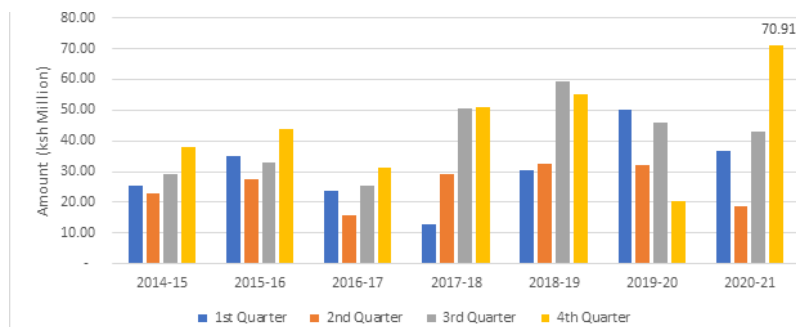
Figure 2.2: Annual Own Source Revenue targets and actual collections



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

Analysis of the quarterly OSR show a robust performance in OSR collections during the third and fourth quarters of all financial years (Figure 2.3). This is mainly attributable to the payments of the single business permits that is due every 31st March of the year. During 2019/20, the quarterly OSR collections were robust compared to the preceding years save for the last quarter. The performance indicated some level of resilience following the slowdown of economic activities at the onset of the COVID-19 pandemic. In 2020/21, the quarterly performance reflects the recovery of economic activities as the county registered growth in OSR collection from the first quarter. Notably, the County realized the highest OSR collections amounting to Ksh 70.91 million during the last quarter of 2020/21. This signifies the path to recovery as the Country contains the COVID-19 pandemic through vaccinations and other Government’s support.

Figure 2.3: Quarterly Own Source Revenue collection



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

2.1 Expenditure analysis

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

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

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

Trends and profile of county government expenditures

County expenditure has over the years been rising as the county escalates its efforts in provision of services to its residents. Total county expenditure has grown significantly since 2013/14. With the implementation of the first full year county budget in 2013/14, actual expenditure in the county increased from Ksh. 2,487.0 million to Ksh. 5,713.5 million in 2020/21 (Figure 2 4). This translates to over 50 per cent increase in county spending over the period. Cumulatively the county has spent a total of Ksh. 31.7 billion between 2013/14 and 2020/21. This comprises of a cumulative Ksh 23.1 billion and Ksh 8.6 billion on recurrent and development expenditures representing 73.0 per cent and 27.0 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: Trends of county government expenditures

Figure 2.4(a): Trends in actual aggregate expenditure

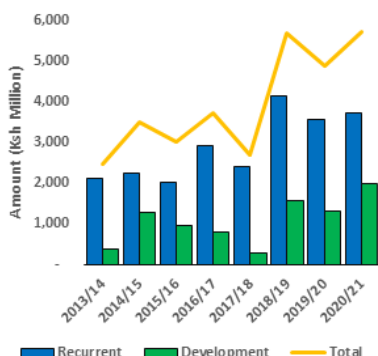
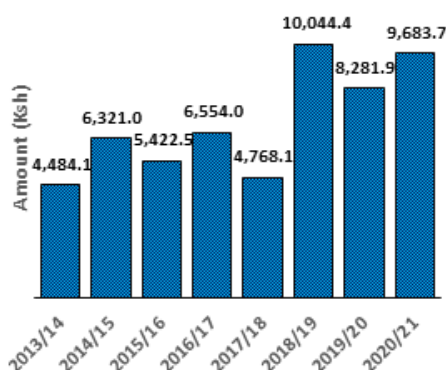


Figure 2.4 (b): Trends in actual per capita expenditure



Data Source: 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 4,484.1 compared Ksh 10,044.4 in 2018/19. Between 2013/14 and 2018/19 per capita spending averaged Ksh 6,265.7. At the end of 2019/20 per capita expenditure stood at Ksh 8,281.9 and then increased to Ksh 9,683.7 at the end of 2020/21.

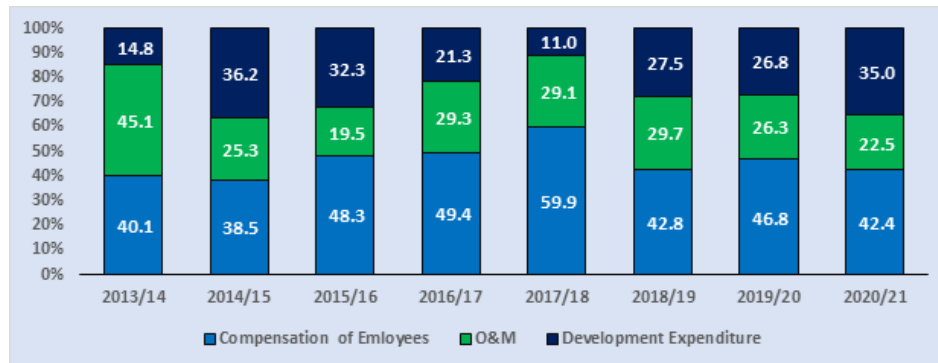
Utilization of public resources in the county

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 development expenditures has mainly been on provision of health services, transport, infrastructure and communication, education, science, technology and vocational training, agriculture, livestock, fisheries, and co-operatives, as well as gender, youth and social services among others

The average county development expenditure between 2013/14 and 2020/21 was 25.6 per cent indicating challenges in development spending. The development expenditure accounted for 14.8 per cent in 2013/14 and increased to 36.2 per cent in 2014/15 and since then took a downward trajectory up to 2017/18. Development expenditure accounted for 32.3 per cent, 21.3 per cent and 11.0 per cent of total expenditure in 2015/16, 2016/17, and 2017/18 respectively. In 2018/19 the performance improved to 27.5 per cent before declining to 23.5 per cent at the end of 2019/20 as presented in Figure 2.6. The COVID-19 pandemic escalated expenditure needs leading to an improvement of development spending to account for 35.0 per cent in 2020/21, the highest since devolution. However, the historical trends suggest the needed intensity of capital expenditure deepening in the county.

On the other hand, compensation of employees has remained above 38.0 per cent during the review period and has been on an increasing trend. The average share of compensation of employees in total county spending over the review period was 46.0 per cent. Surprisingly in 2017/18, compensation of employees exceeded half of the county expenditure.

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



Data Source: Office of the Controller of Budget

Reflecting on expenditures by functional classification or priority spending (Table 2.2), the county spent a combined average of 59.9 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 (25.4%); transport, infrastructure and communication (10.1%); education, science, technology and vocational training (9.5%); agriculture, livestock, fisheries and co-operatives (5.3%); gender, culture, youth, sport and social services (2.4%); environment, water, energy and natural resources (2.8%); physical planning, lands and housing (2.9%); and tourism, trade, industry and entrepreneurship (1.5%). On the flipside, coordinational and administrative functions accounted for a combined average of 40.1 per cent with county assembly leading at 12.8 per cent, finance and economic planning 11.6 per cent, administration and co-ordination of county affairs 8.6 per cent, office of the governor 6.4 per cent while county public service board trailing at 0.9 per cent.

Table 2.2: County departmental/functional spending

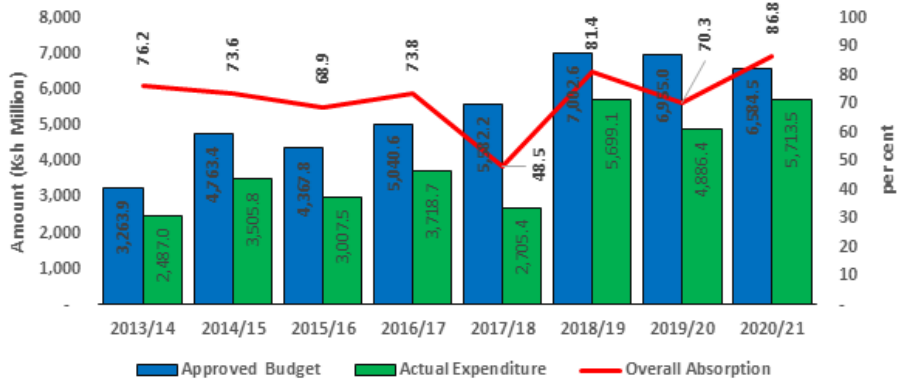
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20		Average	Average share of spending (per cent)
Health Services	732.9	611.3	886.6	912.1	1,549.2	1,133.8	1,592.8	1,059.8	25.4
County Assembly	392.7	563.6	601.5	457.9	568.7	548.3	597.5	532.9	12.8
Finance & Economic Planning	270.3	631.9	349.6	77.1	478.7	732.8	842.2	483.2	11.6
Transport, Infrastructure & Communication	588.1	360.7	414.3	164.8	701.9	359.7	366.1	422.2	10.1
Education, Science, Technical and Vocational Training	182.7	130.4	365.6	382.1	660.4	437.8	607.1	395.1	9.5
Administration and Coordination of County Affairs	361.5	170.0	395.4	252.4	391.7	582.5	351.3	357.8	8.6
Office of the Governor	416.5	241.5	252.5	163.7	337.2	214.0	234.6	265.7	6.4
Agriculture, Livestock, Fisheries & Cooperatives	202.0	103.1	104.8	158.2	291.8	389.4	286.1	219.3	5.3
Physical Planning, Land and Housing	97.7	20.3	42.4	20.2	194.3	92.6	387.2	122.1	2.9
Environment, Water, Energy & Natural Resources.	97.9	43.4	73.3	44.6	180.1	138.6	236.8	116.4	2.8
Gender, Culture, Youth, Sports and Social Services	67.5	56.4	137.9	33.0	205.5	129.1	79.1	101.2	2.4
Trade, Industry, Tourism and Entrepreneurship.	42.5	44.9	51.6	14.8	93.4	102.2	100.9	64.3	1.5
County Public Service Board	53.5	30.1	43.3	24.7	46.3	25.7	31.7	36.5	0.9
Total	3,505.7	3,007.5	3,718.8	2,705.4	5,699.1	4,886.5	5,713.4	4,176.6	100.0

Data Source: Office of the Controller of Budget

Effectiveness of county spending

Overall budget execution averaged 72.4 per cent in the period 2013/14 to 2020/21. In 2013/14 overall total budget execution stood at 76.2 per cent. This execution declined to 73.6 per cent in 2014/15 and slowed further to 48.5 per cent in 2017/18 before sharply increasing to 81.4 per cent in 2018/19. At the end of 2019/20, execution slowed to 70.3 per cent before climbing to 86.8 per cent in 2020/21, the highest since devolution. This means that in 2019/20 only Ksh. 5,7135 million was utilized out of the Ksh 6,584.5 million approved budget.

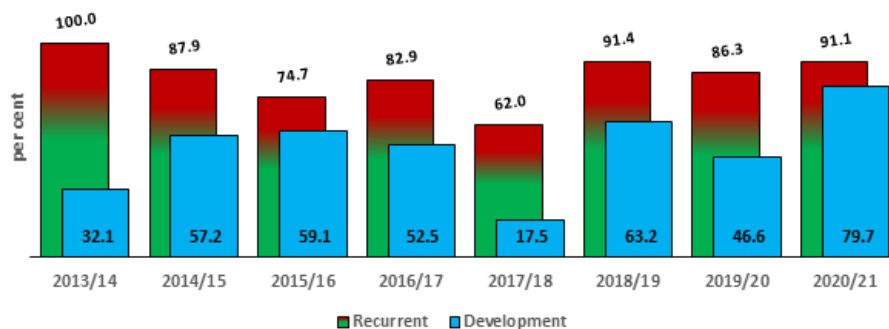
Figure 2.6: Approved versus actual county spending (Ksh million)



Data Source: Office of the Controller of Budget

With regards to development budget execution in the county, the average absorption rate between 2013/14 and 2020/21 was 51.0 per cent (implying that on average over 49 per cent of the development budget is not absorbed). This is a major budget implementation weakness, and the county should enhance 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 84.5 per cent leaving about 15.5 per cent of unspent recurrent budget.

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



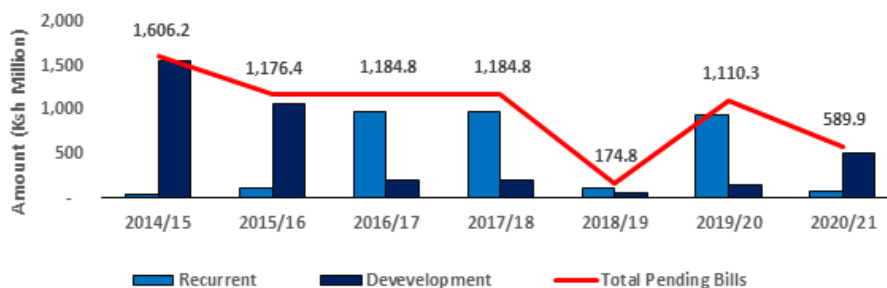
Data Source: Office of the Controller of Budget

Pending Bills

In 2014/15 the county reported Ksh. 1,606.2 million in pending bills. This declined to Ksh. 1,176.4 million in 2015/16 with development spending related pending bills accounting for 97.1 per cent and 90.4 per cent of pending bills in 2013/14 and 2014/15 respectively. In 2016/1 pending bills stood at Ksh. 1,184.8 million and remained the same in 2017/18,

during which recurrent expenditure dominated accounting for 82.5 per cent. Pending bills declined to a record low of Ksh. 174.8 million in 2018/19 before picking up to Ksh. 1,110.3 million by the end of 2019/20. In 2020/21 pending bills declined to Ksh 589.9 million. The average development and recurrent expenditure related pending bills during the review period was Ksh. 537.8 million and Ksh. 466.0 million. If pending bills for development were paid in their respective fiscal year, the execution of development budget in subsequent years would improve.

Figure 2.8: Profile of county pending bills



Data Source: Office of the Controller of Budget\

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

2.2 Key Messages

From the foregoing, the following are observed:

- i. County wage bill has been growing tremendously at the expense of development expenditure. Between fiscal years 2013/14 and 2020/21 county wage bill was on an upward trend and on average accounted for 46.0 per cent of expenditure, while development expenditure has been plummeting on average accounting for 25.6 of total county spending.
- ii. Priority expenditure has been on non-administrative and non-coordinational functions such as health, education, agriculture, roads etc., accounting for an average of 59.9 per cent of actual expenditure. Health sector leads at 25.4 per cent. Administrative and coordinational functions such as county executive, county assembly, public service management and finance account for 40.1 per cent of expenditure.

- iii. Budget execution as measured by absorption rate has largely remained above 60 per cent over the review period. Average overall absorption rate stands at 72.4 per cent. Average development budget absorption rate stands at 51.0 per cent while that of recurrent expenditure stands at 84.5 per cent.
- iv. Pending bills have been declining over the review period but remain high with average development related pending bills accounting for 53.6 per cent of pending bills.

2.3 Recommendations

To steer the county towards achieving its budgetary objective and development goals contained in the ADPs and CIDP, the following measures are proposed:

- i. Mobilize more finances from OSR to increase the available revenues for budgetary operations.
- ii. Seek for more funding in form of grants from development partners to cater for the critical development projects in the county.
- iii. Ensure that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers.
- iv. Ensure the ongoing infrastructure project are completed and suppliers paid within the specified timelines for optimal returns to investment and to spur private sector activity.
- v. Improve budget execution and absorption of development budget by harmonizing project implementation cycles to budgeting and fast-track exchequer releases.
- vi. Reduction of expenditure on compensation of employees within the PFM requirement since ballooning compensation of employees potentially affects execution of key development programs especially if not brought to sustainable levels.
- vii. Monitoring and prompt payment of pending bills as they limit execution of planned activities in subsequent budgets.

3. Agriculture

3.1 Characteristics of the sector

Agriculture accounts for a significant share of economic activity in Vihiga County. More than a 30 per cent of County economic activity is driven by the agriculture sector. In 2017, agriculture accounted for Ksh 20,160 million out of the total Ksh 59,050 million Gross County Product (GCP) amounting to 34.1 per cent of the County's GCP.

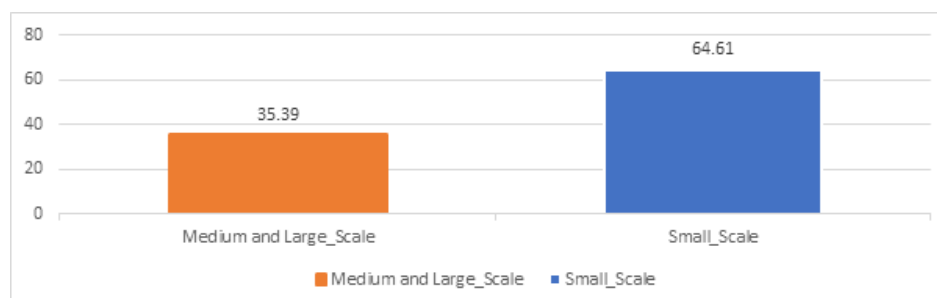
Over 70 per cent of the households in Vihiga County practice farming. About 77 per cent of the households produce crops, 62 per cent produce livestock, 0.37 per cent practice aquaculture and about 0.42 per cent are involved in fishing. About 1.04 per cent of the households practice irrigation farming.

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
Vihiga	143,365	113,753	108,522	84,158	493	625	1,512
Emuhaya	23,804	20,210	19,319	15,249	105	108	256
Vihiga	23,375	18,652	17,927	14,385	87	98	244
Sabatia	31,422	25,789	24,892	19,441	81	134	329
Luanda	26,766	20,058	18,984	14,155	78	132	340
Hamisi	37,986	29,042	27,398	20,928	142	153	343
Kakamega Forest	12	2	2	-	-	-	-

Source: 2019 Kenya Population and Housing Census

Regarding scale of production, we follow the FAO criterion on land size 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, more than half of the farming households (64.6 per cent) in Vihiga County are “small-scale” farming with a land holding of 0.675 or less acres of land.

Figure 3.1: Scale of operation: per cent of households

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

Classified in the Western - High Population Density, Mixed Staples and Cash agroecological zone as per the Agricultural Sector Transformation and Growth Strategy (ASTGS) 2019-2029, crop production is key in the County. An overall analysis of the County agricultural production indicates among the top food crops produced by households in Vihiga include maize, beans, bananas, sweet potatoes, kales, cassava and sugarcane.

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

County/Sub County	Vihiga	Emuhaya	Vihiga	Sabatia	Luanda	Hamisi
Maize	105,807	18,949	17,479	24,235	18,597	26,545
Beans	89,528	15,952	15,281	21,396	14,273	22,625
Bananas	84,487	15,553	14,877	19,856	13,598	20,603
Sweet Potatoes	50,944	9,938	9,811	10,280	7,874	13,041
Kales	46,248	8,444	7,942	10,952	8,030	10,880
Cassava	40,867	8,014	7,724	8,626	6,315	10,188
Sugarcane	25,329	3,788	5,077	6,417	3,636	6,411
Ground Nuts	14,238	2,902	5,400	380	3,421	2,135
Onions	11,438	1,454	1,955	2,555	1,514	3,960
Sorghum	5,160	1,243	988	958	1,178	793
Tomatoes	4,613	604	1,035	777	946	1,251
Potatoes	4,222	671	760	967	713	1,111
Cabbages	2,308	276	415	618	342	657
Green grams	2,243	345	628	562	369	339
Millet	2,062	559	400	318	431	354

Source: 2019 Kenya Population and Housing Census

Key permanent crops among households in Vihiga include Avocado and Mangoes.

Table 3.3: Distribution of Households Growing Permanent Crops by Type and County

County/Sub County	Tea	Coffee	Avocado	Citrus	Mango
Vihiga	11,273	1,717	34,321	1,233	26,209
Kenya	476,613	478,936	966,976	177,445	796,867

Source: 2019 Kenya Population and Housing Census

Resource productivity is another key important factor in determining the agro-processing potential (scale) of the County and would have a great impact on farmers' incomes and the County's GCP. An assessment of horticultural productivity indicates Vihiga's value of fruits production in 2019 amounted to Ksh 73.3 million. The area under fruit was 418 Ha with a production of 2,889 MT. The major fruits grown in order of value importance are banana, pineapples, mango, avocado, macadamia nuts, yellow passion and cashew nuts.

Table 3.4: Fruits Grown in Vihiga County

Type of Fruit	Area in Ha	Production in Tons	Value in Shillings
Banana	255	1,915	38,450,000
Pineapples	24	330	14,850,000
Mango	51	330	6,600,000
Avocado	34	220	6,600,000
Macadamia nuts	13	3	3,000,000
Yellow passion	7	35	1,650,000
Cashew nuts	11	10	1,000,000
Guavas	19	28	560,000
Lime	2	16	480,000
Pepino melon	2	2	120,000
Total	418	2,889	73,310,000

Source: Agriculture and Food Authority (2019)

In 2019, the value of vegetables production in the County amounted to Ksh 89.1 million. The area under vegetables was 423 Ha with a production of 2,694 MT. The major vegetables grown in order of value importance are cabbage, spider plant, sweetcorn, grain amaranth, African nightshade and cowpeas.

Table 3.5: Vegetables grown in Vihiga County

Type of Vegetables	Area in Ha	Production in Tons	Value in Shillings
Cabbage	92	1,080	21,600,000

Spider Plant	108	450	16,850,000
Sweetcorn	54	268	12,290,000
Grain Amaranth	42	243	11,470,000
African Nightshade	33	171	9,840,000
Cowpea	47	154	7,660,000
Kales	5	56	3,920,000
French Beans	10	150	3,000,000
Pumpkin Fruit	14	28	1,400,000
Babycorn	7	18	900,000
Slenderleaf/Rattlepod/Mitoo	2	4	160,000
Jute Mallow/Mrenda	9	72	
Total	423	2,694	89,090,000

Source: Agriculture and Food Authority (2019)

In 2019, the value of MAPs production in the County amounted to Ksh 960,000. The area under MAPs was 12 Ha with a production of 48 MT. The major MAPs grown are Bulb Onions.

Table 3.6: Medicinal and Aromatic Plants (MAPs) Grown in Vihiga County

Type of Medicinal and Aromatic Plants (MAPs)	Area in Ha	Production in Tons	Value in Ksh
Bulb Onion	12	48	960,000

Source: Agriculture and Food Authority (2019)

Animal production is also a key economic activity in Vihiga County. Other than rearing the traditional livestock (i.e. cattle, sheep and goats), the County has promoted poultry production, pig farming and aquaculture among farming households in the County.

Table 3.7: Distribution of Households Rearing Livestock and Fish by County and Sub County

County/Sub County	Kenya	Vihiga	Emuhaya	Vihiga	Sabatia	Luanda	Hamisi
Indigenous Chicken	3,337,700	72,658	13,378	12,687	16,937	12,036	17,620
Indigenous cattle	2,260,439	54,900	10,821	9,715	11,159	9,114	14,091
Goats	1,898,887	14,395	1,946	3,555	2,787	2,386	3,721
Exotic cattle -Dairy	939,916	12,316	1,716	1,985	4,315	1,745	2,555
Exotic Chicken Layers	194,517	2,399	247	411	686	381	674
Sheep	1,299,893	2,946	458	350	735	565	838
Rabbits	124,122	1,961	486	192	422	425	436
Exotic cattle -Beef	167,625	1,151	182	134	251	285	299

Exotic Chicken Broilers	79,461	821	82	106	188	201	244
Pigs	110,383	1,324	296	98	329	311	290
Fish Ponds	22,019	478	102	83	78	75	140
Beehives	201,406	338	70	34	86	31	117
Fish Cages	3,361	23	6	4	1	3	9
Donkeys	500,682	37	18	1	7	8	3

Source: 2019 Kenya Population and Housing Census

The above characterization of farming households highlights the priority value chain opportunities in maize, beans, bananas, sweet potatoes, kales, cassava and sugarcane, avocado, mangoes, cattle, sheep, goats, poultry, pigs and aquaculture. With majority of the households farming the identified products, the Vihiga transformation strategy in agriculture need to prioritize value chains in the identified areas to positively impact of household livelihoods.

Agri-Food Challenges in COVID-19

i) Human capital/employment levels – by gender

Agricultural labor participation in Vihiga indicates relative dominance by women agriculture related occupations in the County. Majority of the population in Vihiga 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 second popular agriculture related occupation in the County are the agricultural, fishery and related labourers. The workers in this sub-major group include Farm-hands and Related Labourers; Forestry Labourers; and Fishery, Hunting and Trapping Labourers. The classifications are based on the Kenya National Occupational Classification Standard (KNOCS)

Figure 3.2: Agriculture-related labour force participation



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

An assessment of the COVID-19 effects on hours worked by in agriculture related occupations indicates workers in all the identified sub-sectors worked fewer hours in the reference period as compared with the usual hours worked per week. The most affected workers are the agricultural, fishery and related labourers who recorded the highest difference of 12 hours between the usual and actual hours worked in a week.

Figure 3.3: Changes in Hours Worked by in Agriculture Related Occupations



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

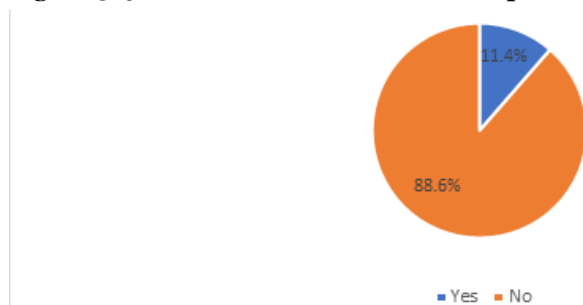
The identified COVID-19 effects on labour force participation are likely to have negative effects on output thereby increasing yield gaps.

ii) Market operations

Successful transformation of smallholder agricultural production in Vihiga 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.

As a result of COVID-19, there has been a further slow down on trade activities due to the restrictions on movements. From the KNBS conducted between 30th May and 6th June 2020, 11.4 per cent of the households in Vihiga County indicated over the past 1 week there had been instances where the household or a member of the household could not access the markets/grocery stores to purchase food items.

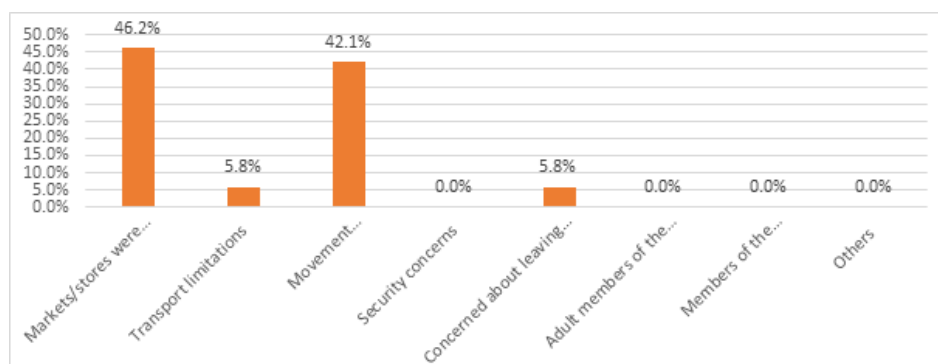
Figure 3.4: Limited access to markets to purchase food items



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

Majority of the households indicated the key reasons for not accessing the markets/grocery stores to purchase food items were closure of the markets/grocery stores (46.2 per cent) and movement restrictions (42.1 per cent).

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

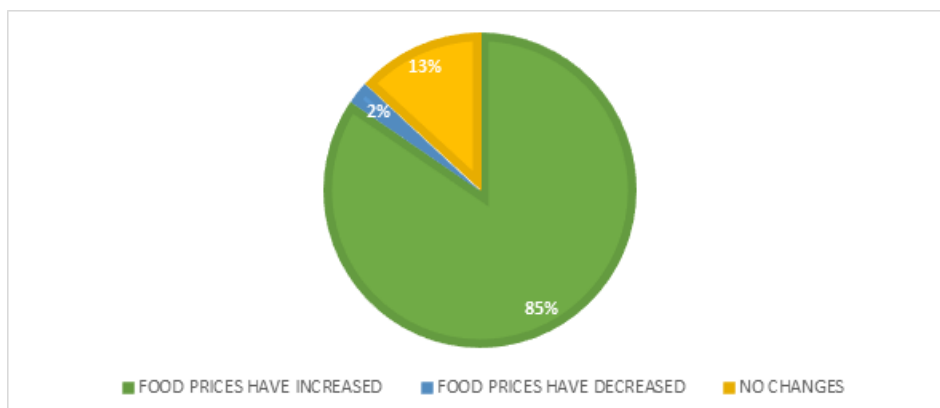


Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

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

Restrictions affecting seamless movement of food commodities are likely to cause a hike in prices in non-production areas and fall in prices in production areas. 85 per cent of households in Vihiga County indicated that over the past 2 weeks from the reference period, while 13 per cent indicated that they had not experienced a change in the prices.

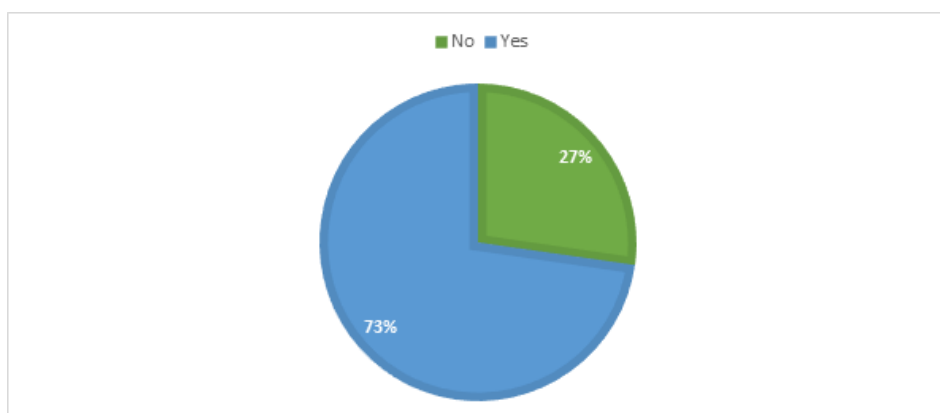
Figure 3.6: Percentage of households experiencing change in food commodity prices



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

On the magnitude of the price shocks, 73 per cent of the households indicated they faced a large rise in food prices in the past two weeks from the reference period.

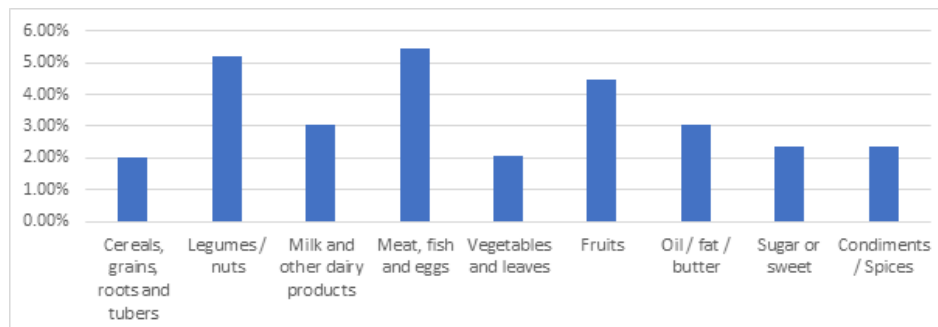
Figure 3.7: Proportion of households facing large food price shocks



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

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

Figure 3.8: per cent Households reporting that the following food items were not readily available in their locality

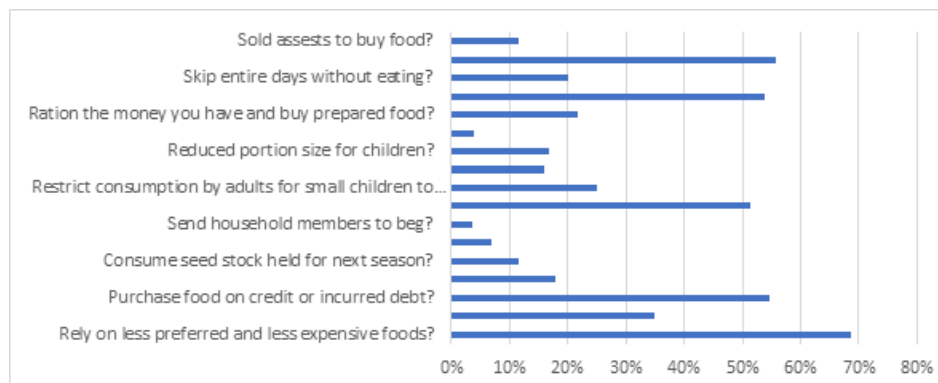


Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

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

Among the key strategies adopted by households to mitigate COVID-19 effects on food consumption include relying on less preferred and less expensive foods (68.6 per cent), decreased buying some non-food products (55.9 per cent), purchase food on credit or incurred debt (54.6 per cent), reduce number of meals eaten in a day (53.8 per cent) and limit portion size at mealtimes (51.5 per cent).

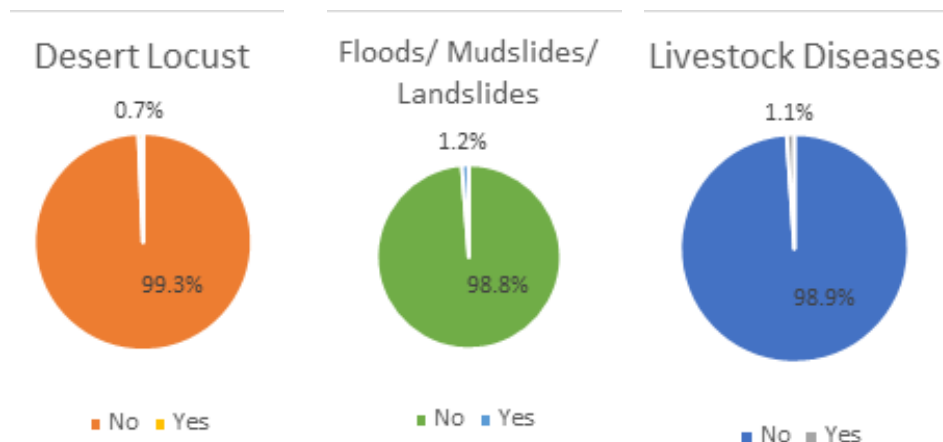
Figure 3.9: per cent of households where the following strategies were adopted for at least one day



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

Additional challenges faced by the County, albeit at low levels during the COVID pandemic period include Desert locusts (0.7 per cent); Floods/ Mudslides/ Landslides (1.2 per cent); and Livestock Diseases (1.1 per cent).

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



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

Agri-Food Constraints Faced in the County

Among the key constraints the County faces include:

- i. Variable and extreme weather events which have increased in frequency and intensity over the years adversely affecting crop and livestock production
- ii. Low agro-processing and value addition capacity of the County. For instance, the County has only one tea factory (by the name Mundete).
- iii. Land fragmentation due to land sub-division which affects productivity as production activities are becoming uneconomically viable.
- iv. Low productivity due to subdivisions and traditional methods of farming, raising concerns of food shortages, particularly staple foods like maize.
- v. Overreliance on rain fed agriculture despite frequency in extreme climate conditions, such as, drought episodes
- vi. Low use and access to quality and affordable inputs including certified seeds, water, animal feeds, fish feeds, diversified fish species, artificial insemination (AI) services, fertilizers, livestock vaccination and mechanized production.
- vii. Unsustainable land and natural resources management practices affecting soil fertility and ultimately productivity of land
- viii. Low crops, livestock, and livestock products marketing opportunities necessary for improved incomes

- ix. Low commercialization levels of farming where majority of farmers practice farming for subsistence purposes and as a hobby rather than a business.
- x. Low adoption of high value crops that would increase farmers returns
- xi. Slow uptake of digital platforms to market agricultural produce.
- xii. Inadequate extension and veterinary services
- xiii. Dependence of rain fed agriculture despite frequency in extreme climate conditions, such as, drought episodes
- xiv. Inadequate and weak farmers' associations and cooperative which hamper agricultural marketing
- xv. Farm losses and post-harvest waste.

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

3.2 Opportunities with COVID19 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.
- ii) Transport, Storage, and ICT sectors
- iii) Financial and insurance activities
- iv) Accommodation Food services
- v) **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. Provision of affordable and quality inputs including tea seedlings, quick maturing crops and vegetables
- ii. Increased marketing opportunities/ platforms locally, across counties and internationally with the steady opening up of economies.

- iii. Developing County-private partnership in enhancing agro-processing and value addition capacities and linking farmers to product markets
- iv. Storage and cooling facilities including at collection points to minimize spoilage and wastages
- v. Adoption of drought resistant livestock pastures/fodder and fodder
- vi. Adoption of sustainable land and natural resources management practices to include minimal land subdivision practices, soil and water conservation, tree planting, and changing of crop type.
- vii. Investments to expand and enhance water harvesting and sustainable and efficient irrigation.
- viii. Adoption of drought resistant crops, livestock pastures/fodder and fodder
- ix. Diversification of production into fast maturing vegetable crops through sustainable irrigation.
- x. Investments to enhance water harvesting, sustainable and efficient irrigation.
- xi. Uptake of digital platforms to: - build capacities of farming households in modern agricultural technologies; and market agricultural produce.
- xii. Strengthening farmers' associations and cooperatives as an additional solution to marketing challenges
- xiii. Enhance farmers access to supportive services to include early-warning systems, extension advisory and information services, and training on natural resource management, fodder conservation and value addition.
- xiv. Improved crop and livestock emergencies surveillance systems in the County.
- xv. Enhancing farmers technical and resource capacities to act on agricultural advisory information received

3.3 Emerging Issues

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

3.4 Recommendations

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

- (i) Legislation and implementation of policies to guarantee training programmes, credit facilities and land accessibility to youths at the identified rural youth organizations.
- (ii) Innovative approaches to farming and identification of entry points have resulted in improvements in youth skills and opportunities in agriculture. Most agricultural programs tend to be highly focused on production, where youth face specific barriers that might be mitigated in potential roles higher up the value chain.
- (iii) Develop partnership with development partners, the National Government, NGOs, Research Institutions and the Private sector in enhancing agroprocessing and value addition capacities of the County as envisioned in the national Agricultural Transformation and Growth Strategy (ASTGS). The County has only one tea factory (Mudete Tea Factory).
- (iv) Invest in storage and cooling facilities particularly at collection points. Coupled with agro-processing, this will minimize spoilage and post-harvest losses of perishable products.
- (v) Access to quality and affordable inputs including certified seeds, water, animal feeds, artificial intelligence (AI) services, fertilizers, and livestock vaccination. This can be achieved through cooperatives and farmers associations.
- (vi) Promote transformation of agricultural production among small holder farmers in the County from subsistence agriculture to market-oriented production by linking farmers to product markets beyond the County level across the agricultural value chain.
- (vii) Establish programmes for surveillance of disasters such as extreme weather conditions and livestock disease at the County level equipped with relevant technical specialists and finances to effectively prevent, prepare, respond and prevent risks. There is also need for the County to mitigate disasters, such as those related to floods, through institutional capacity development, vulnerability analyses and updates, monitoring and early warning systems, and public education.
- (viii) Digitize the agri-food sector to enhance: - training and building capacities of farming households in modern agricultural technologies, provision of advisory and information services, marketing agricultural produce at a wider scope beyond the County level and improving access to innovative support services including credit and insurance services.
- (ix) Invest in sustainable irrigation in the County through partnership with development partners. To support expansion of sustainable irrigation, there is need to promote development of Irrigation Infrastructure and technologies in the County.

4 Water, Sanitation and Hygiene

4.1 Characteristic of the sector

The county has adequate water sources which include permanent rivers, springs, shallow wells, dams, pans, and community boreholes as well as rainwater collection which provides clean and safe water for drinking and for livestock use. The region also receives heavy rainfalls during the months of March to June, however water sources dry up during periods of low rainfall and drought thus affecting household's accessibility to water. The country has no sewerage treatment plant therefore most of the households tend to use pit latrine as well as septic tank.

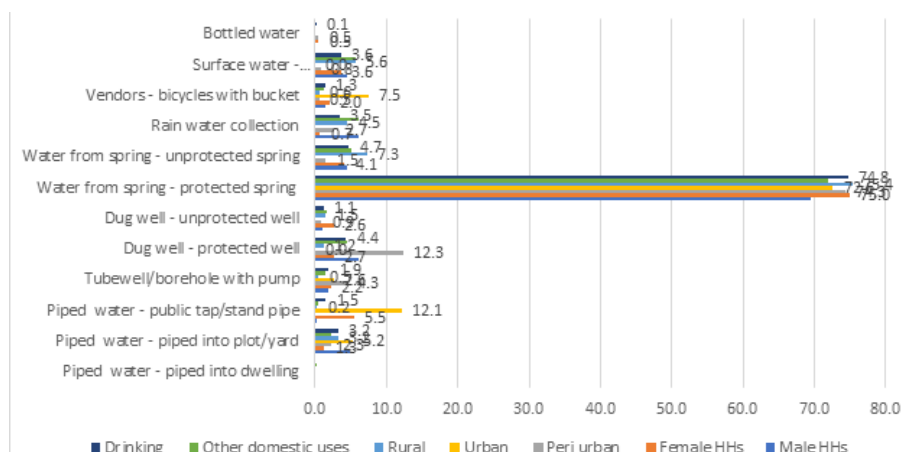
Men are more involved in water sourcing than women, though women spend more time in water sourcing, an average of 41 minutes than men as shown below. No information on gender, age, skills of human capital involved in water and sanitation sector. Though there are also water vendors, who sell water to residents especially in urban centres and small market centres.

Access to source of water by households

The major source of water for drinking utilized by households in the county are water from spring(protected) (74.8%), dug well (protected) (4.4%), is surface water²(3.6%) and rainwater (3.5%). Only a small portion of households have access to piped water into plot/ yard (3.2%), this is more among male (4.8%) than female headed households (1.3%). Additionally, most rural (75.4%) urban, (72.6%) and peri-urban (74.3%) population uses water from protected spring, as well as other sources. On the other hand, the major source of water for other domestic uses in the county is water from spring(protected) (72%).

² Surface water include rivers/dams/lakes/Streams/ponds

Figure 4.1: Access to water by households

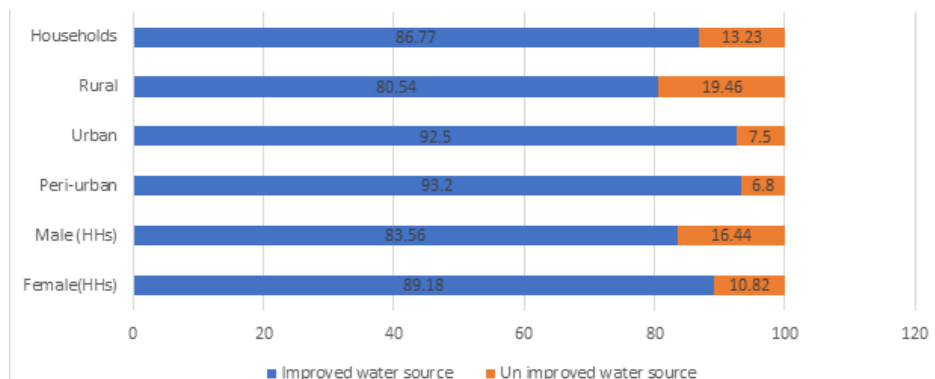


Source: KNBS 2015/2016

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

Access to improved sources of drinking water³ is high in the county among households (86.8%), as well as in urban (92.5%), rural (80.5%) households. This is also like the male and female headed households as shown in the figure below.

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

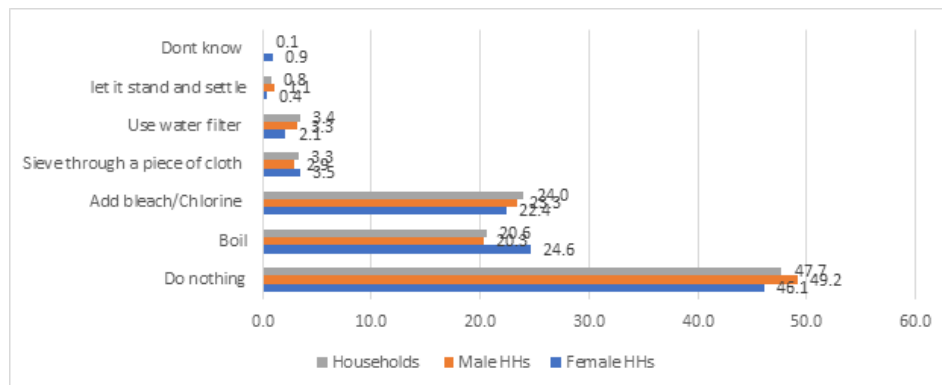


Source: KNBS 2015/2016

³ Improved source of drinking water includes; water from the following sources Piped water - piped into dwelling, Piped water - piped into plot/yard, Piped water - public tap/stand pipe, Tubewell/borehole with pump, Dug well - protected well, Dug well - unprotected well, Water from spring - protected spring). While unimproved sources of water include water from spring - unprotected spring, Rainwater collection, Vendors - tankers-truck, Vendors - cart with small tank/drum/bucket, Vendors-bicycles with bucket, Surface water, river/streams/pond/dam/lake/cannal/irrigation channel Bottled water. This is according to the WHO and UN classification of sources of water.

Most households (47.7%) both male (49.2%) and female (46.1%) headed households do not do anything to make drinking water safe. But there are some proportions of households (20.6%) male (20.3%) and female (24.6%) add bleach.

Figure 4.3: What households do to make drinking water safe

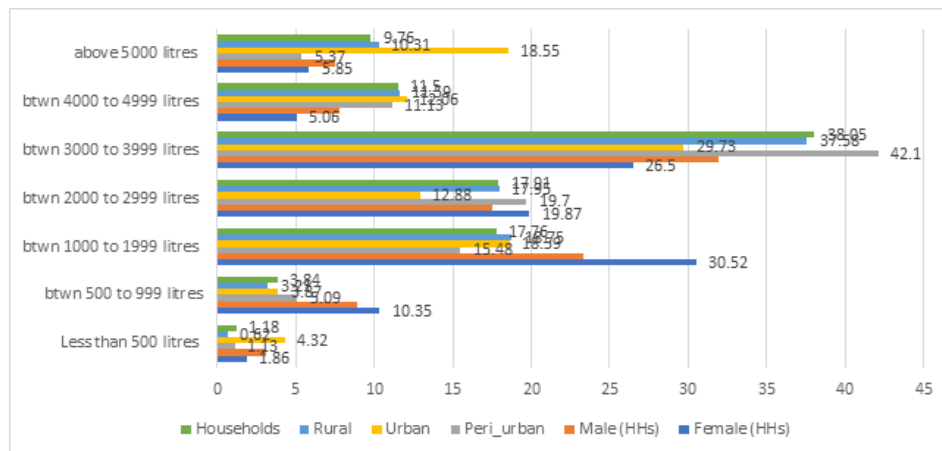


Source: KNBS 2015/2016

Volumes for water used by households in a month

Most households (38.1 per cent), both rural (37.6 per cent) urban (29.7 per cent) and peri urban (42.1 per cent) have used between 3000 to 3999 litres of water in the past one month as shown below.

Figure 4.4: Volumes of water used by households in a month



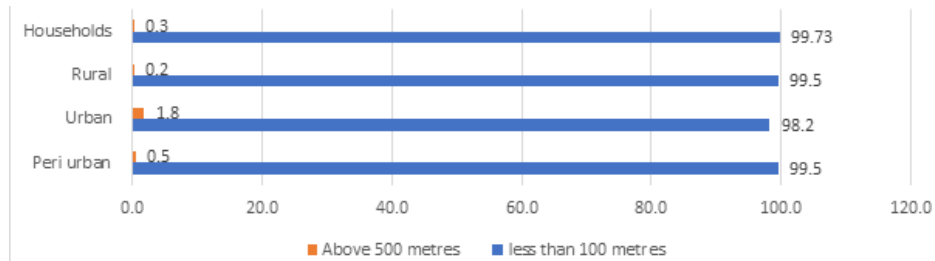
Source: KNBS 2015/2016

Distance covered to water source and average time spend to and

from the water source

Majority of the households (99.5%) 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 as shown below.

Figure 4.5: Distance covered by households to and from water sources

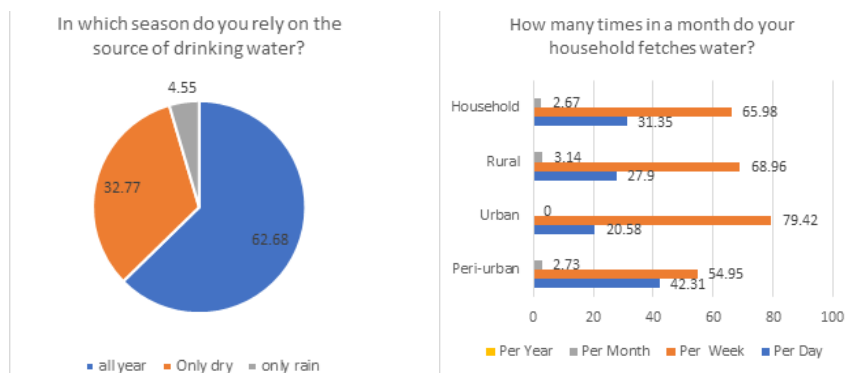


Source: KNBS 2015/2016

Access and reliability of water sources

Majority of households (62.3%) in the county relies on the main source of drink water all year round. Most households (31.4%) rural (27.9%) urban (20.6%) peri urban (42.3%) go to fetch drinking water from the sources every day. This means there may be more of interactions with other household members in areas where water sources are shared, this may lead to increase on infections of COVID-19 where COVID-19 guidelines of social distance and avoidance of crowded place may not be observed. It also implies that households may not be having water storage facilities that can minimize number of trips to water points in a day, therefore they may be at risk of water shortages during dry months.

Figure 4.6: Access and reliability to water sources by households



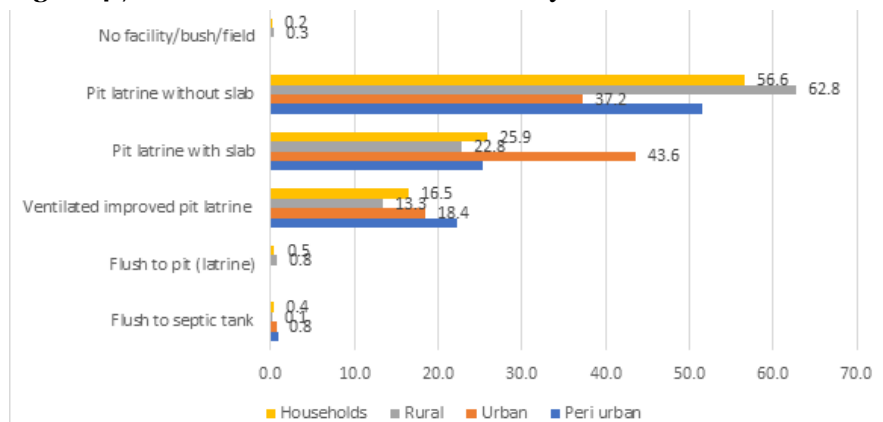
Source: KNBS 2015/2016

Source: KNBS 2015/2016

Access to sanitation

Access to sanitation by most of households (56.6%), rural households (62.8%) and peri-urban (51.6%) is by use pit latrine without slab compared to urban households (43.6%) that uses pit latrine with slab. Only small proportions of households have access to flush to pit (latrine).

Figure 4.7: Access to sanitation in the County



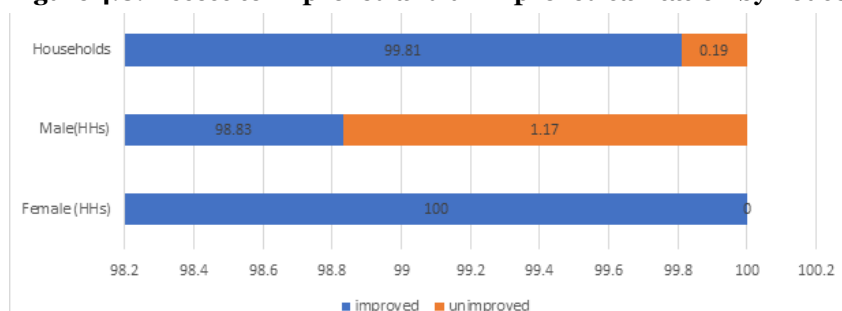
Source: KNBS 2015/2016

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

Access to improved and unimproved sanitation

Majority of the households (99.1%) have access to improved sanitation facilities⁴. This also similar among male (98.8%) and female (100%) headed households.

Figure 4.8: Access to improved and unimproved sanitation by households



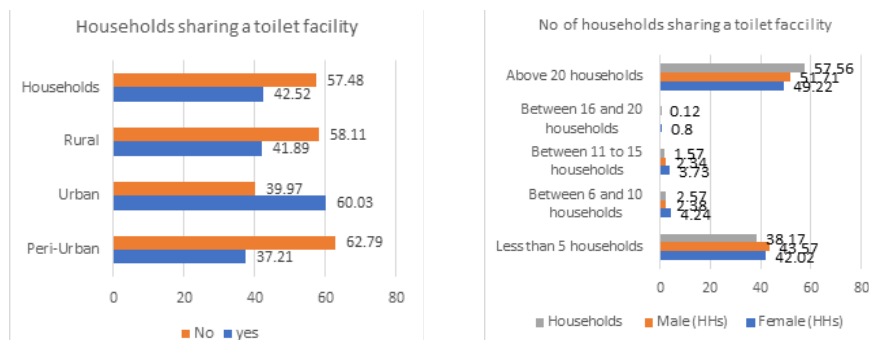
Source: KNBS 2015/2016

Sharing of a toilet facility

⁴ Improved sanitation includes; flush to piped sewer, flush to septic tank, flush to pit (latrine), flush to somewhere else, flush to unknown place, ventilated improved pit latrine, pit latrine with slab, pit latrine without slab). Unimproved sanitation includes; composting toilet, bucket toilet, hanging toilet/hanging, no facility/bush/field, others.

Additionally, a larger proportion of households (42.5 per cent) do share a toilet facility with other households, this is more in in peri-urban (62.8%) and rural (58.1%) compared to urban (40%) households. On the other hand, there are large proportions of households (57.6%) who share a toilet facility with 20 other households.

Figure 4.9: No of households sharing a toilet facility



Source: KNBS 2015/2016

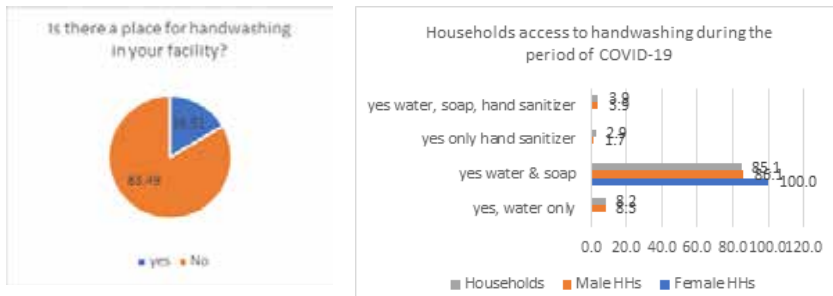
Source: KNBS 2015/2016

Sharing of toilet facilities with large number of households puts individuals at risk of contracting COVID-19, and other infectious diseases in cases where proper hygiene is not maintained as well as social distancing measures. Similarly, WHO guidelines require separate sanitation facilities for suspected COVID-19 cases which households may not be able to achieve.

Access to WASH during the COVID-19 period

WASH has been identified very important in helping to curb transmission of infectious diseases, despite this, most of the households (83.5%) of the households in the county do not have a handwashing facility in their households. Further, on the other hand, most households (85.1 per cent) have access to WASH (Water and soap) during this period of COVID-19, as well as access to access to both water, soap and hand sanitizer (3.9 per cent).

Figure 4.10: Access to wash during the COVID-19 period



Source: KNBS 2015/2016 Source: KNBS 2015/2016

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

Constraints faced

Currently the county government is facing challenges in revenue collections since COVID-19 has resulted into reduced incomes among households and businesses, this has forced the county government to defer collection of revenue from the water services it provides as well as financial support to water services providers. COVID-19 poses health challenges to water and sanitation officers if they get infected, they must be self-isolated, and this may lead to disruption of services. Other constraints include, drought, water leakages

The demand for water remains high not only at household level but it has become essential in institutions, offices, marketplaces, and other public places. Water is also supportive to agriculture, livestock keeping, tourism and manufacturing.

4.2 Opportunities with COVID19 in WASH

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

4.3 Emerging issues

Clean and safe water remains essential in the fight against COVID-19, water is utilized for maintaining hygiene more so in hand washing as well as other specialized uses in households, institutions and in public places.

- i. There is high demand for piped water in the county which stands at 52,912 M³ per day against 8,889M³ produced and supplied by the county per day⁵. The supply is also likely to diminishes in times of reduced rains and droughts thus leading to insufficient water supply in households, making households unable to observe hand hygiene.
- ii. Most households in the county have higher access to improved sources of water

both in rural (81.9 per cent), urban (92 per cent) and peri urban (94 per cent). Clean and safe water guarantees good health leading to low health expenditures among households.

- iii. There is low access to piped water in rural (3.4 per cent), urban (17.3 per cent) compared to peri urban areas (94.4 per cent). This means low revenue from piped water for the county government. Similarly, it also implies low access to clean and safe water thus putting households at risks to water related diseases.
- iv. Access to improved sanitation remains high in the county both in rural (99 per cent), urban (100 per cent) and peri urban households (100 per cent).
- v. Household connectivity to piped sewer is low at less than 1 per cent in both rural, urban and peri urban areas. Low connectivity to piped sewer denies households from access to safe sanitation as well as revenue from sanitation services.
- vi. Sharing of a toilet facility with other households is common among households, this is more in urban (60 per cent), rural (42 per cent) compared to peri urban (36.7 per cent) areas. Toilet sharing puts households at risk of contracting COVID-19, and other infectious diseases in cases where proper toilet hygiene is not maintained.
- vii. There is a higher access to hand washing, with majority of households (85.1 per cent) having access to WASH (water and soap) while only 3.9 per cent of the households had access to both water, soap and hand sanitizer during this period of COVID-19. This minimizes the risks of infections.
- viii. On the other hand, 83.4 per cent of the households do not have a designated handwashing facility in their households. This may put households at risk of contracting infection due to inability of maintaining hand hygiene.

4.4 Recommendations

- i) The county to increase piped water supply in households, institutions and public places through drilling of boreholes in all the sub-counties. 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) The county to upscale abstraction of water from rivers, spring protections, harvesting of rainwater from roof and other catchments to help achieve increase to water access and to reduce time taken to water sources.
- iii) The county to increase water storage capacity to store harvested water during rainy seasons
- iv) Rehabilitate existing water infrastructure to reduce water leakages to reduce water

losses.

- v) Introduce automated billing software to help curb the increasing value of non-revenue water.
- vi) Establish water supply monitoring system for efficiency water supply and management.
- vii) Expand and rehabilitate the existing piped water connection infrastructure to help increase access to water. The county government can collaborate with the private sector, non-Governmental organization and the local community to expand the water infrastructure.
- viii) Expand sewer infrastructure to accommodate more households
- ix) Build toilets in communities, schools, health centres, marketplaces and other public places to help increase access to safe sanitation. Increased access to sanitation can be achieved through collaboration between county government, national government, development partners and PPP to expand sewer infrastructure and to accommodate more households.
- x) The county to help in putting place WASH facilities in communities, households, public places to increase access at the household level. Increased access to WASH can be achieved by supporting households with access to water, soap and WASH facilities, sensitization on the importance of handwashing. Collaboration between County Government, Non-Governmental Organizations, local community, and the media is important to realize increased access to WASH among households.
- xi) The county to organize sensitization forums on the importance of handwashing through the media and in community forums.
- xii) Inculcate a culture of hand hygiene in the county

5 Manufacturing, Trade and MSMEs

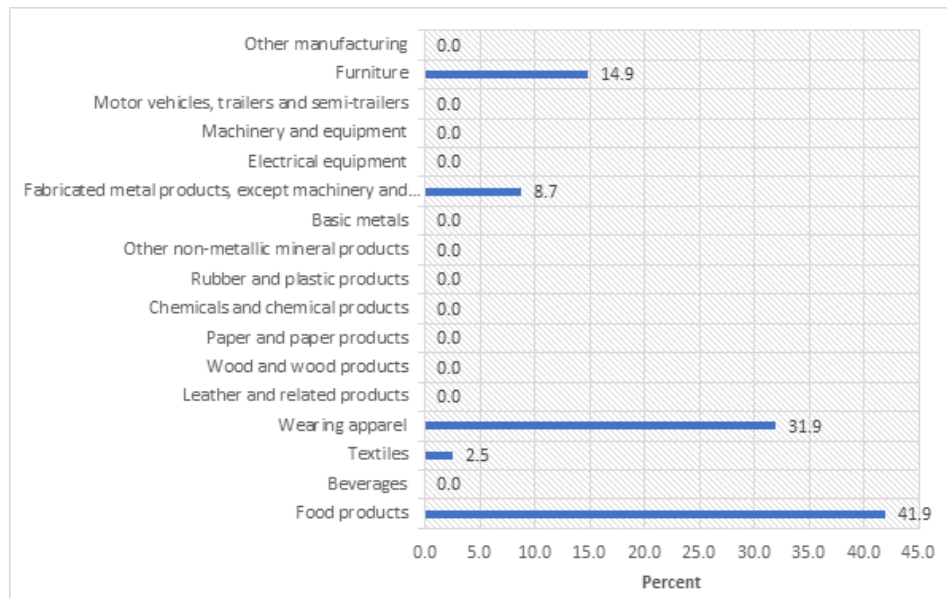
5.1 Characteristics of Manufacturing sector

Vihiga County has 1,764 establishments involved in manufacturing activities which comprise of 13.1 per cent of a total of 13,505 firms and all are micro in size (KNBS, 2016). The main drivers of the economy of the county include agriculture (34 per cent), services (55 per cent), and manufacturing (0.6 per cent) (GCP, 2019).

Sector of operation

According to the KNBS, 2016 survey, the key sub-sectors that drive manufacturing in Vihiga County include: food products (41.9%), wearing apparel (31.9%), furniture (14.9%), and fabricated metal products, except machinery and equipment (8.7%) (Figure 5.1). These are sub-sectors that are considered essential in dealing with COVID-19 are likely to experience increased activity with focus on food production, production of Personal Protective Equipment (PPEs) and hospital beds. The key products useful in value addition and driving manufacturing include millet, avocado, papaya, sweet potatoes, cassava as well as French beans, and production of African indigenous vegetables.

Figure 5.1: Sector of operation in manufacturing

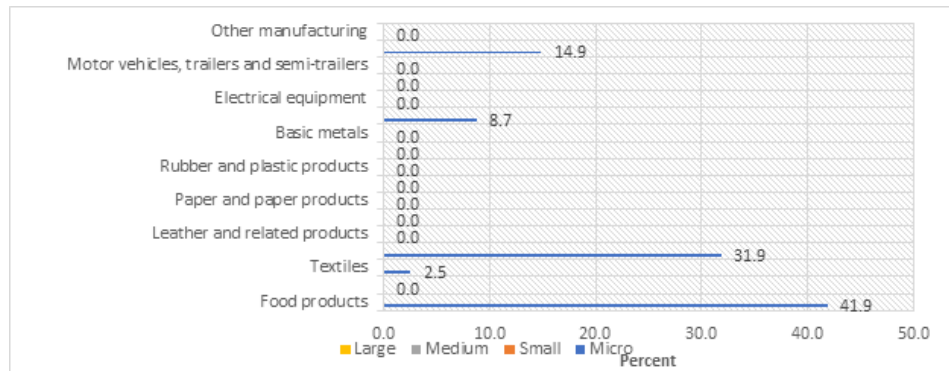


Source: KNBS (2016)

Sector of operation by size

Nearly all the establishments in Vihiga County are micro in nature and operate in food products (41.9%), wearing apparel (31.9%), furniture (14.9%), fabricated metal products except machinery and equipment (8.7 per cent), and textiles (2.5%) (Figure 5.2).

Figure 5.2: Manufacturing firms by sector and size

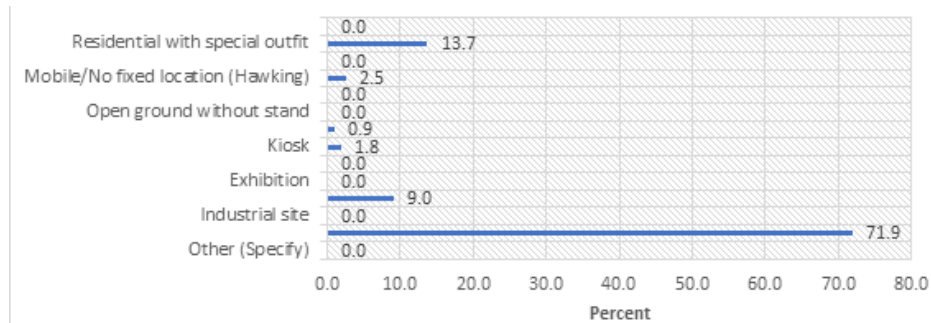


Source: KNBS (2016)

Location of manufacturing firms by type of premises

The common premises used by manufacturing firms in Vihiga County are commercial (71.9%), residential with special outfit (13.7%), market stall (9%), hawking (2.5%), and kiosk (1.8%) (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 Vihiga county are dominantly owned by male (45%), with females comprising 26.9 per cent while 28.1 per cent are jointly owned and all are micro in size (Table 5.1).

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

Gender	All	Micro
Male	794 (45)	794 (45)
Female	475 (26.9)	475 (26.9)
Joint	495 (28.1)	495 (28.1)

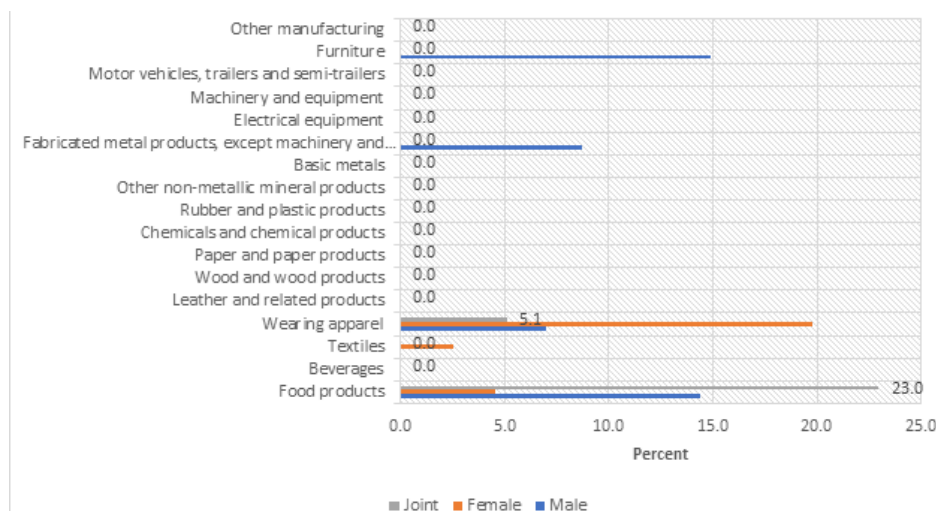
Total	1,764 (100)	1,764 (100)
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Source: KNBS (2016)

Distribution of Manufacturing firms by gender and sector

Majority of the sub-sectors in manufacturing are male dominated including furniture (14.9%), food products (14.4%), fabricated metal products except machinery and equipment (8.7%) and wearing apparel (7%). Females are mostly found in the wearing apparel (19.8%), food products (4.6%), and textiles (2.5%) (Figure 5.4). Additionally, the following sub-sectors are jointly owned by both males and females: food products (23%) and wearing apparel (5.1%).

Figure 5.4 Distribution of manufacturing firms by gender and sector



Source: KNBS (2016)

Regarding employment, the manufacturing sector employs more men (65.1 per cent) than women (34.9 per cent) (table 5.2).

Table 5.2: Employment by gender and size for manufacturing firms

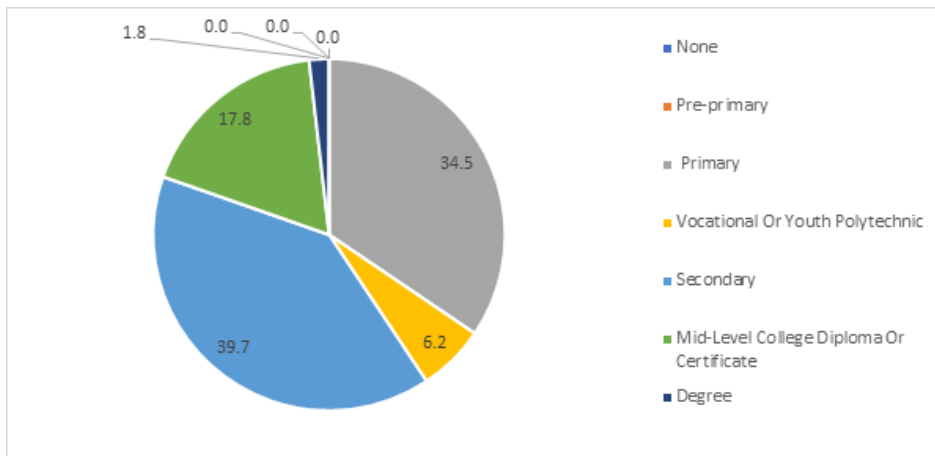
Number of employees	Micro	Total
Male	3,017 (65.1)	3,017 (65.1)
Female	1,617 (34.9)	1,617 (34.9)
Total	4,634 (100)	4,634 (100)

Source: KNBS (2016)

Education levels of Manufacturing firm owners

Majority of owners of firms in manufacturing have secondary (39.7 per cent), primary (34.5 per cent), mid-level college diploma or certificate (17.8 per cent) and vocational or youth polytechnic (6.2 per cent) education (figure 5.5). About 1.8 per cent of the manufacturing firm owners possess a degree education.

Figure 5.5: Education levels of manufacturing firm owners

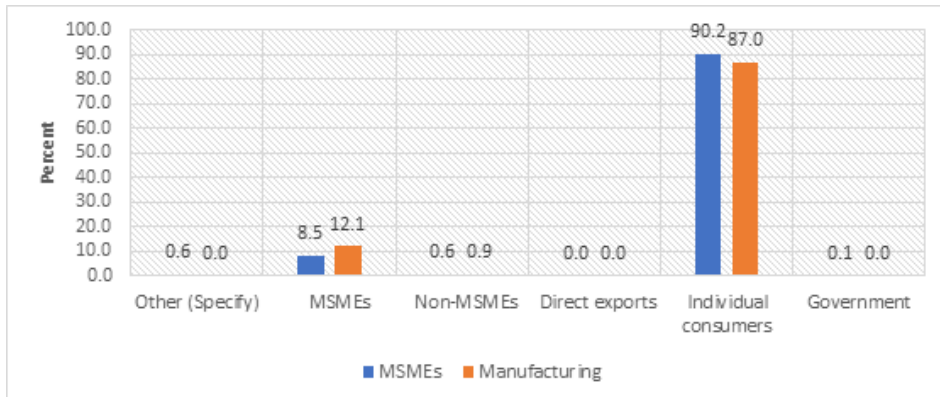


Source: KNBS (2016)

Source of markets

Majority of manufacturing establishments and MSMEs in general rely on individual consumers for markets at 87 per cent and 90.2 per cent respectively (Figure 5.6). MSMEs and non-MSMEs are also important sources of market to these two sectors as well.

Figure 5.6: Source of markets

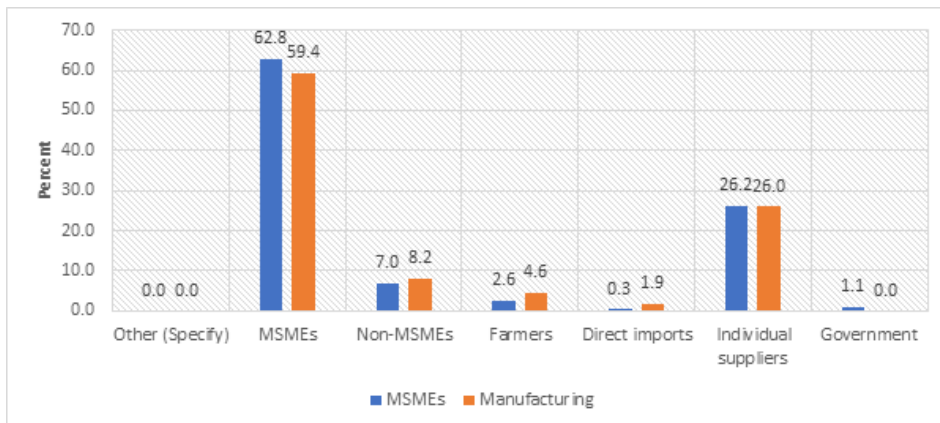


Source: KNBS (2016)

Source of material inputs

Overall, manufacturing establishments and MSMEs source for material inputs from amongst MSMEs at 59.4 per cent and 62.8 per cent respectively (Figure 5.7). 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 1.9 per cent and 0.3 per cent respectively. Disruptions in the external source markets therefore has adverse implications to both manufacturing firms and MSME operations in Vihiga County.

Figure 5.7: Source of material inputs



Source: KNBS (2016)

Level of innovation by firms in Manufacturing

Table 5.3 reports the levels of innovation amongst establishments in manufacturing in Vihiga County. More process innovations are reported at incidence of 16.8 per cent, product comprise 14.1 per cent while market innovations are 7 per cent.

Table 5.3: Level of innovation by firms in manufacturing

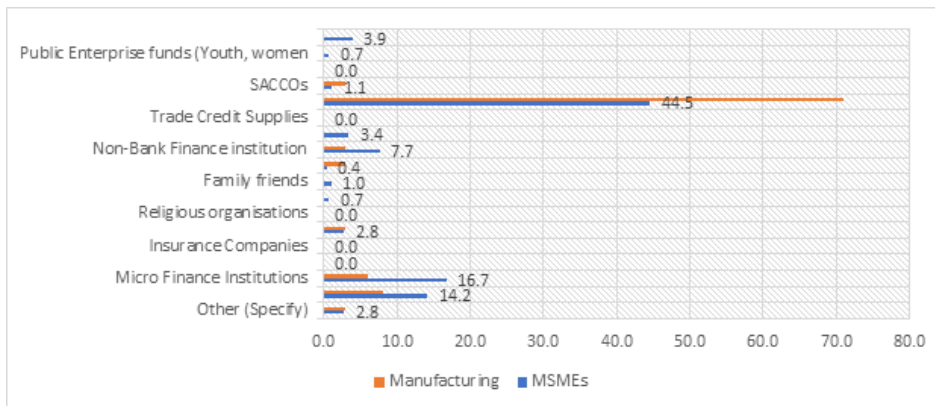
Type of innovation	Micro			Total
	Don't know	No	Yes	
Product	33 (1.9)	1,482 (84)	249 (14.1)	1,764 (100)
Process	33 (1.9)	1,435 (81.4)	296 (16.8)	1,764 (100)
Market	33 (1.9)	1,608 (91.1)	123 (7)	1,764 (100)

Source: KNBS, 2016

Access to credit for Manufacturing and MSMEs firms

According to the MSME 2016 survey, 67.3 per cent of MSMEs and 68.5 per cent of those in manufacturing applied for credit. The main sources of credit for firms in manufacturing include: commercial banks (71%), public financing agencies and cooperatives (8.1%), microfinance institutions (6%), SACCOs (3%), non-bank finance institution (3%), among others. MSMEs mainly access credit from commercial banks (44.5%), microfinance institutions (6.7%), and public financing agencies and cooperatives (14.2%) (Figure 5.8).

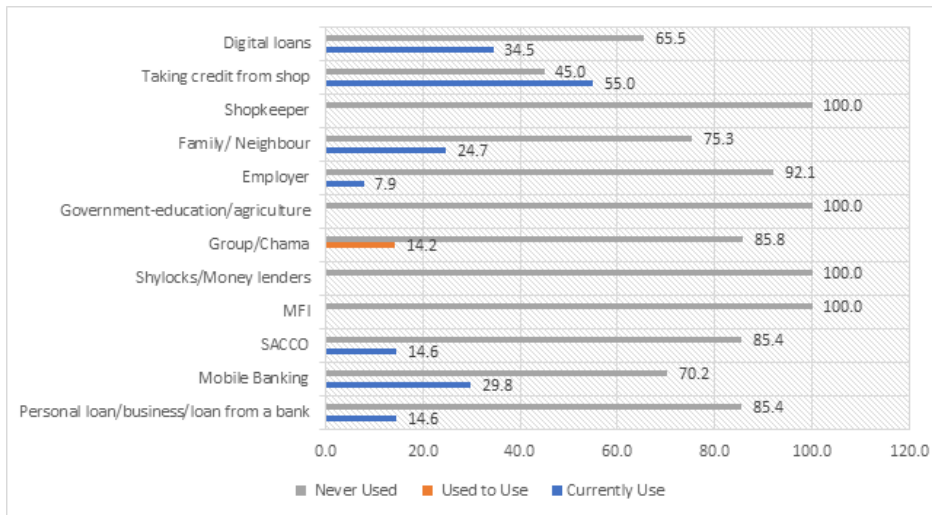
Figure 5.8: Sources of finance



Source: KNBS (2016)

Recent evidence from FinAccess 2019 provides further insights on sources of credit for businesses in Vihiga County. Businesses commonly obtain credit from the conventional sources such as shops (55%), family/neighbour (24.7%), personal/business loans from banks (14.6%), SACCOs (14.6%), and from employer (7.9%). Emerging sources of credit for businesses in Vihiga county include mobile money (29.8%) and digital loans (4.7%) (Figure 5.9).

Figure 5.9: Recent sources of credit

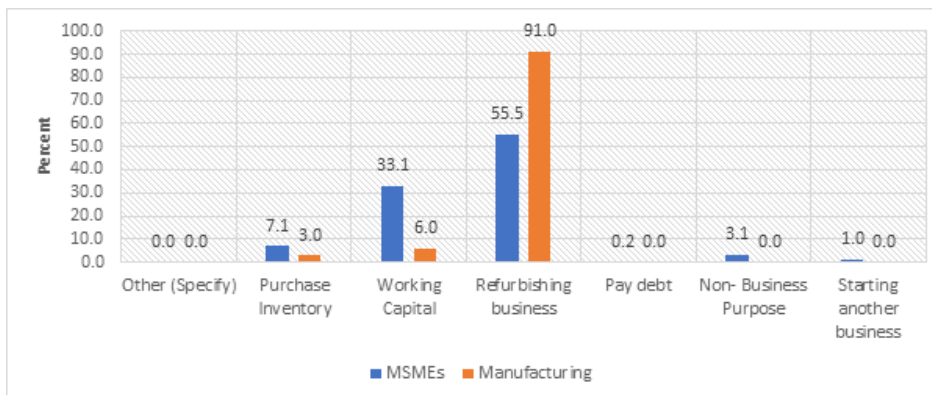


Source: FinAcess (2019)

Purpose of credit

Figure 5.10 presents the main purpose of credit by both MSMEs and establishments in manufacturing. Broadly, manufacturing firms require credit for: business refurbishment (91%), working capital (6%), and purchase of inventory (3%). MSMEs in Vihiga County require credit for business refurbishment (55.5%), working capital (33.1%), and purchase inventory (7.1%), and non-business purposes (3.1%).

Figure 5.10: Main purpose of credit

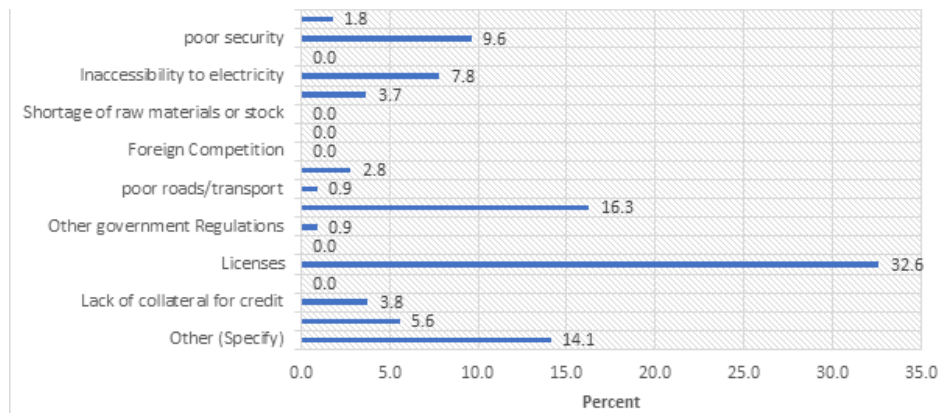


Source: KNBS (2016)

Constraints faced by manufacturing firms

The key constraints faced by manufacturing firms in Vihiga County include licenses (32.6%), lack of markets (16.3%), poor security (9.6%), inaccessibility to electricity (7.8%), lack of collateral for credit (3.8%), and power interruption (3.7%) (Figure 5.11).

Figure 5.11: Constraints faced by manufacturing firms

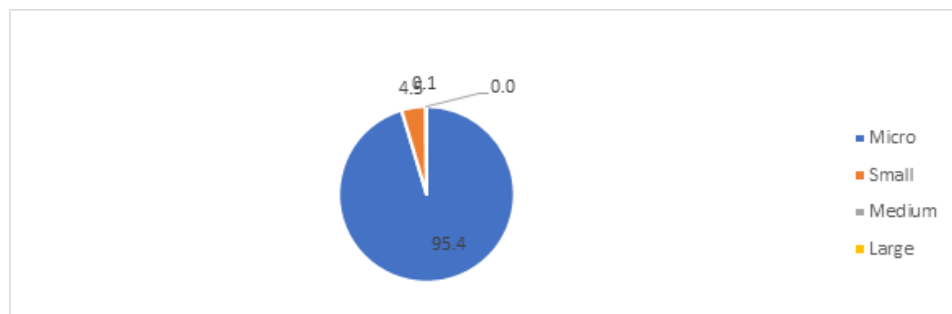


Source: KNBS (2016)

b) Micro, Small and Medium Enterprises (MSMEs)

Vihiga County has 13,505 establishments⁶ with 12,883 (95.4%) being micro, 604 (4.5%) are small, and 17 (0.1%) are large enterprises (KNBS, 2016) (Figure 5.12).

Figure 5.12: Distribution of MSMEs by size



Source: KNBS (2016)

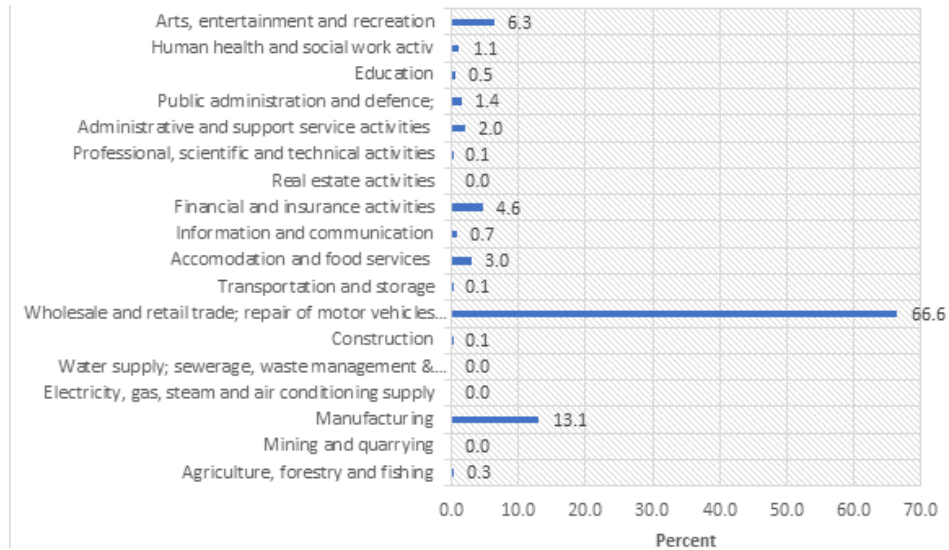
Sector of operation by MSMEs

Majority of MSMEs in Vihiga County operate in the wholesale and retail trade; repair of motor vehicles and motorcycles (66.6%), manufacturing (13.1%), arts, entertainment and recreation (6.3%), financial and insurance activities (4.6%), and accommodation and food

⁶ After applying weights.

services (3%) (Figure 5.13). Ideally, these are the sectors that have been affected most by the COVID-19 pandemic and need focus in achieving re-engineering and recovery.

Figure 5.13: Sector of operation by MSMEs

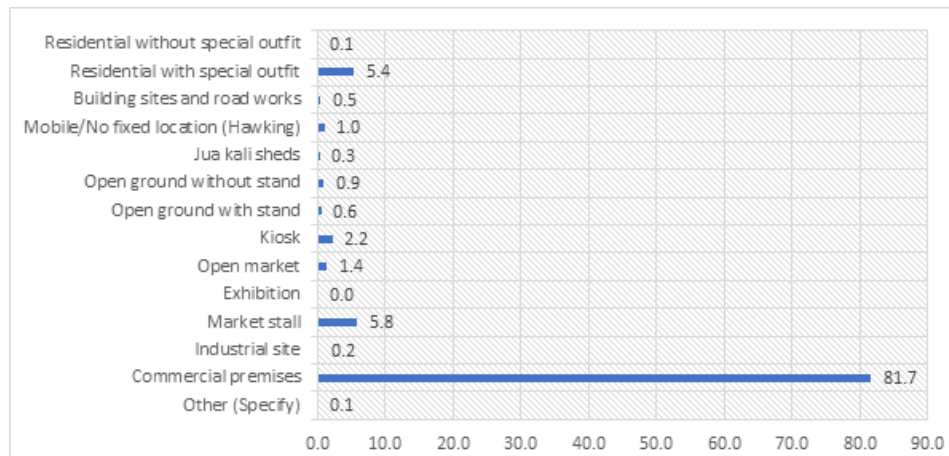


Source: KNBS (2016)

Location of the businesses by type of premises

MSMEs in Vihiga County are largely located in commercial premises (81.7 per cent), market stall (5.8%), and residential with special outfit (5.4%) (Figure 5.14). Majority of the businesses in the County could be having a lot of difficulties in meeting their rental obligations due income disruptions occasioned by COVID-19. According to the May 2020 KNBS COVID_19 survey, 86.3 per cent of the non-farm businesses attributed non-payment of household rental obligations to reduced incomes/earnings while 13.7 per cent attributed the same to temporary layoffs/closure of businesses. For those involved in farm businesses all the respondents attributed the same to reduced incomes/earnings.

Figure 5.14: Location of businesses by premises



Source: KNBS (2016)

Distribution of MSMEs by gender and size

According to table 5.4; 40.1 per cent are male owned, 31.5 per cent are female owned, while 28.4 per cent are jointly owned (male/female). For Micro establishments, 41 per cent are male owned, 32.1 per cent are female owned, while 26.9 per cent are jointly owned.

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

Gender	A11	Micro	Small	Medium
Male	5,410 (40.1)	5,284 (41)	126 (20.8)	0 (0)
Female	4,259 (31.5)	4,138 (32.1)	121 (20.1)	0 (0)
Joint	3,835 (28.4)	3,461 (26.9)	357 (59.1)	17 (100)
Total	13,505 (100)	12,883 (100)	604 (100)	17 (100)

Source: KNBS (2016)

For small enterprises, jointly owned establishments dominate at 59.1 per cent, while male and female are at a rate of 20.8 per cent and 20.1 per cent respectively. Medium sized enterprises are fully jointly owned.

In terms of employment, the micro sized establishments employ more people (76.9%) compared to small (20.6%) and medium (2.5%) (Table 5.5). Micro firms employ 43.8 per cent male and 33.1 per cent female and small sized employ 8.8 per cent male and 11.8 per cent female. Medium sized establishments employ 0.6 per cent male and 1.8 per cent females. Overall, more men (53.2%) are employed by MSMEs in Vihiga county than women (46.8%).

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

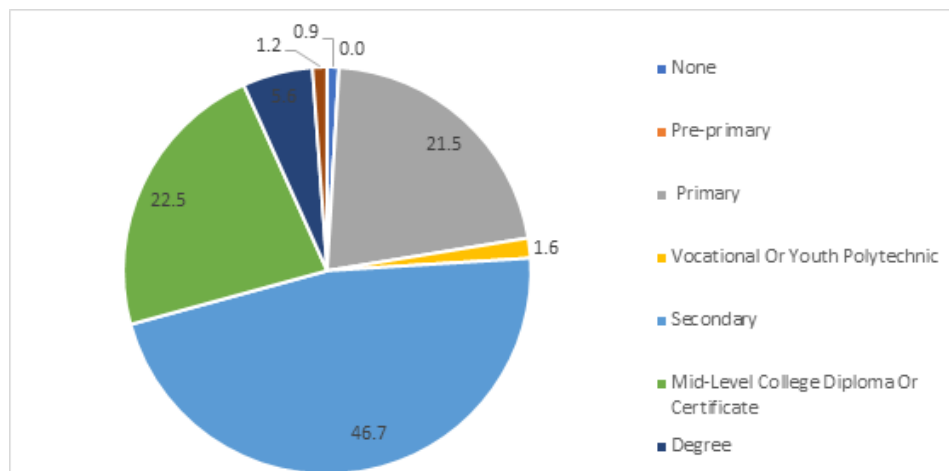
Gender	Micro	Small	Medium	Total
Male	17,548 (43.8)	3,525 (8.8)	259 (0.6)	21,332 (53.2)
Female	13,267 (33.1)	4,744 (11.8)	726 (1.8)	18,736 (46.8)
Total	30,815 (76.9)	8,269 (20.6)	985 (2.5)	40,068 (100)

Source: KNBS (2016)

Education levels of MSME owners

The education levels of MSME owners are depicted in Figure 5.15 as follows: secondary (46.7%), mid-level college diploma or certificate (22.5%), primary (21.5%), degree (5.6%). About 1 per cent of the MSME owners have pre-primary education (Figure 5.15).

Figure 5.15: Education levels of MSME owners



Source: KNBS (2016)

Level of innovation by MSMEs

Table 5.6 reports low levels of innovation at 10 per cent for product, 4.7 per cent for process, and 4.6 per cent for market innovations amongst micro-sized establishments. Similarly, low incidences of innovation are reported amongst small establishments at 0.9 per cent for product and process while 0.7 per cent for market innovations.

Table 5.6: Level of innovation by MSMEs

Type of Innovation	Micro				Small				Medium		Total
	Refused to answer	Don't know	No	Yes	Re-fused to answer	Don't know	No	Yes	No	Yes	
Product	0 (0)	91 (0.7)	11,062 (84.5)	1,310 (10)	0 (0)	28(0.2)	463 (3.5)	114 (0.9)	17 (0.1)	0 (0)	13,084 (100)
Process	0 (0)	195 (1.5)	11,656 (89.1)	612 (4.7)	0 (0)	28(0.2)	463 (3.5)	114 (0.9)	17 (0.1)	0 (0)	13,084 (100)
Market	0 (0)	195 (1.5)	11,667 (89.2)	600 (4.6)	0 (0)	28(0.2)	480 (3.7)	96 (0.7)	17 (0.1)	0 (0)	13,084 (100)

Source: KNBS (2016)

E-commerce

Participation in e-commerce by households in Vihiga 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 (2.7%) than women (1.7 per cent). With introduction of stay-at-home protocols due to COVID-19 online trade has been expected to thrive, little may be impacted in Vihiga County since fewer households participate in the same.

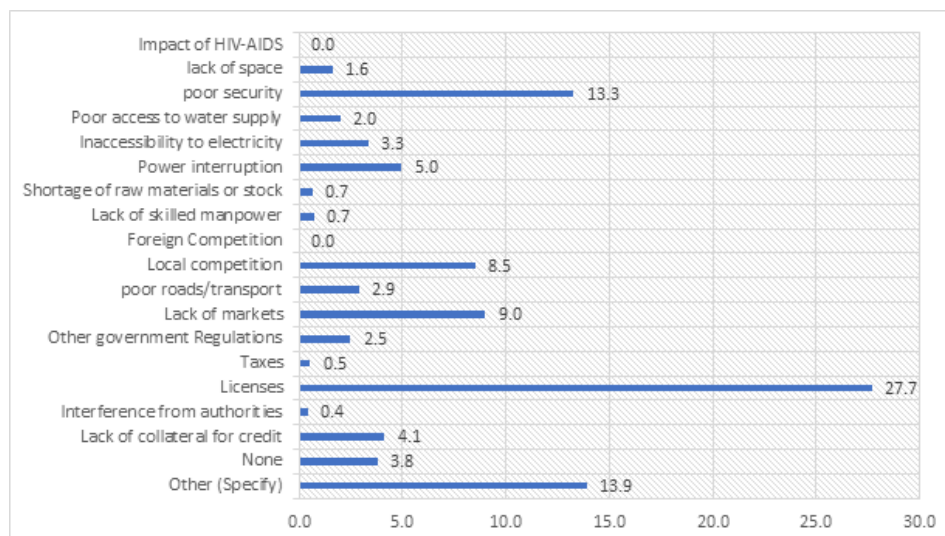
Turnover tax

Only 7.1 per cent of MSMEs in Vihiga County (963) 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 following are the major constraints faced by MSMEs in Vihiga County: licenses (27.7 per cent), poor security (13.3 per cent), lack of markets (9 per cent), local competition (8.5 per cent), power interruption (5 per cent), and inaccessibility to electricity (3.3 per cent) (Figure 5.16).

Figure 5.16: Main constraints faced by MSMEs



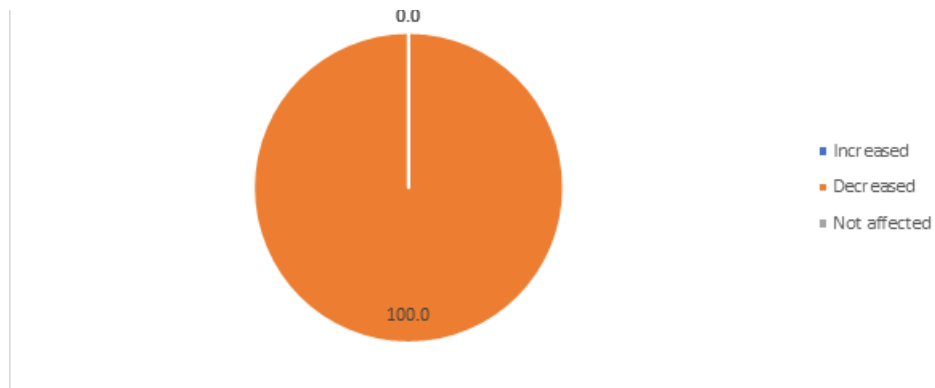
Source: KNBS (2016)

A study on County Business Environment for MSEs (CBEM) identified other constraints faced by MSMEs in Vihiga 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 characterised by low levels of innovation, lack of training and apprenticeship programme for artisans, fragmentation due to multiplicity of players who offer training and capacity building, and lack of monitoring and evaluation of training programmes. With the market environment, MSEs face inadequate market for their local products; stiff competition among themselves; and unfair trade practises which manifest through; contract enforcement, counterfeiting, dumping (substandard goods) and misrepresentation (through weight, price, ingredient). MSEs also face bottlenecks related to; insecurity; multiple licences and permits; numerous procedures for obtaining licenses; and shortage of raw materials.

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

Figure 5.17 presents the effects of COVID-19 on household non-farm and farm businesses in Vihiga County. 100 per cent of the respondents report a decrease in their business activities due to the COVID-19 pandemic. Equally 100 per cent of the respondents have had a decrease in their income due to COVID-19. This is an indicator that COVID-19 is already having a negative effect on the non-farm and farm businesses even though the situation is still evolving.

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

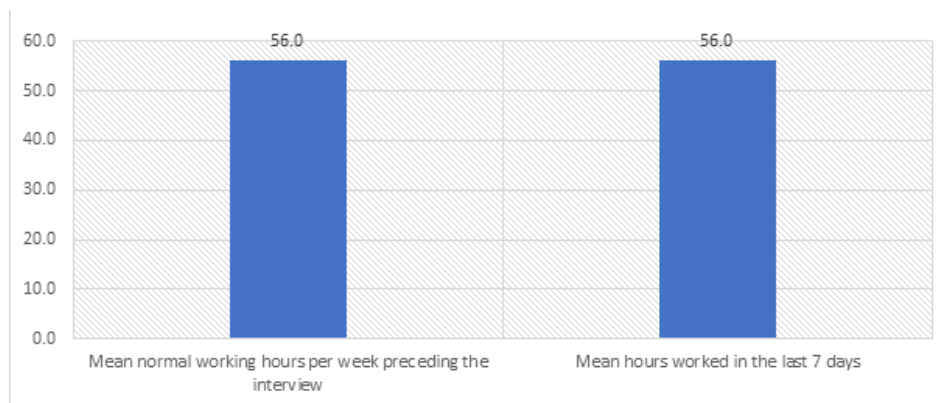


Source: KNBS, COVID-19 Survey 2020

Labour dynamics

During the period considered in KNBS, COVID-19 Survey 2020 data collection, respondents did not report any improvement in the mean working hours for household non-farm and farm businesses in Vihiga County which implies that economic activities largely remained unscarthed between the interview periods .

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



Source: KNBS, COVID-19 Survey 2020

Key Messages:

- a) The key sectors that drive the Vihiga County economy include: Services, Agriculture and Manufacturing. Hence, support should be targeted to these sectors, to ensure re-engineering of the County economy.
- b) 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.

- a) COVID-19 presents opportunities that could be harnessed like development and support of innovations to address the pandemic. These include production of essential goods such as; masks, Personal Protective Equipment (PPEs), and sanitizers, disinfectants, canned foods, immunity boosting products, hospital beds and ventilators. As the pandemic subsides a strategy is required for smooth transition.
- c) Manufacturing establishments must also adopt to cope with the new guidelines which could include rearranging floor plans to allow for social distancing.
- d) Training and capacity building are important in assisting MSMEs to surmount the shocks faced during the pandemic but also allow for re-emergence.
- e) In terms of re-engineering, there is need to consider establishing support measures to re-vitalize and re-open businesses that collapsed during the crisis within the county.

5.2 Opportunities with COVID-19 in Industrial Recovery and Growth

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

- (i) Agro - processing for value addition with important areas of focus include maize and banana production and processing; millet, avocado, papaya, sweet potatoes, cassava as well as French beans; and production of African indigenous vegetables such as: Jute Mallow (Murenda), Amaranth (Terere), Black Nightshade (Managu), Spiderplant (Saga), and Cowpeas (Kunde).
- (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 granite.

Effects of COVID-19 on this sector

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

- (i) There has been an increased wave of innovations during the pandemic.
- (ii) have been faced with declining sales and revenues due to depressed demand and low circulation of money in the County, which is caused by loss of incomes by the residents.

- (iii) There is a decrease in trade activities in the County due to restrictions on movements due to fear of attending physical markets, where there is fear of contracting the disease.
- (iv) Businesses are faced with challenges of increased costs resulting from the need to comply with new protocols in form of; provision of handwashing and sanitization points, wearing of masks even for workers, rearrangement of floor plans for social distancing especially for manufacturers and awareness creation.

5.3 Emerging Issues

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

5.4 Recommendations

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

- (i) Collaborate with National government to establish a granite processing plant in the county as per the Third Medium Term Plan 2018-2022 flagship programmes and projects of enhancing mining for development.
- (ii) Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify, and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Related, the County will inject some stimulus to cushion the businesses and traders through affordable credit, waiver of some County taxes, cess, and other charges.
- (iii) COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitizers, hospital beds and ventilators. It is an opportunity to spur innovation and promote manufacturing and industry development and generation of jobs for the youth.
- (iv) Adopt the new pandemic guidelines including rearranging floor plans to allow for social distancing and maintain high standards of hygiene through having hand washing facilities in manufacturing establishments.

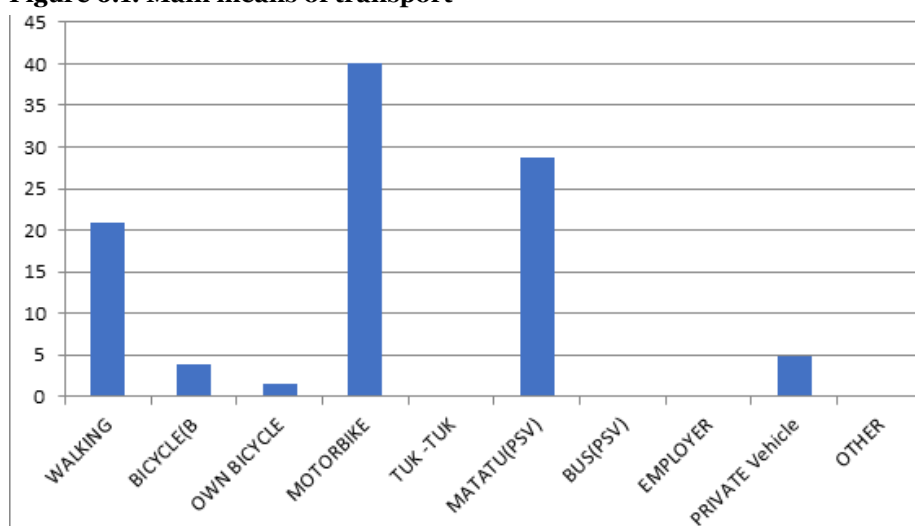
6. Infrastructure

6.1 Transport sector

6.1.1 Characteristics of the sector

Majority of households own a bicycle (11.5 per cent) and a motorcycle (7.8 per cent). Car ownership is at 3.0 per cent (KNBS, 2019). The main means of transport used in the County is motorbike 40.08 per cent, followed by PSV matatus at 28.75 per cent, walking at 20.85 per cent, private car at 4.91 per cent and bicycle (boda boda) 3.96 per cent, figure 6.1, while 91.23 per cent of the population had not changed the main means of transport (KNBS, 2020b). On average, residents travel 1.66 kilometres to their workplace at an average cost of Ksh 75. The cost of transportation has increased due to reduction in maximum number of passengers allowable in public service vehicles. For the commute to school, residents spend on average Ksh 332.89 (KIHBS, 2015/16).

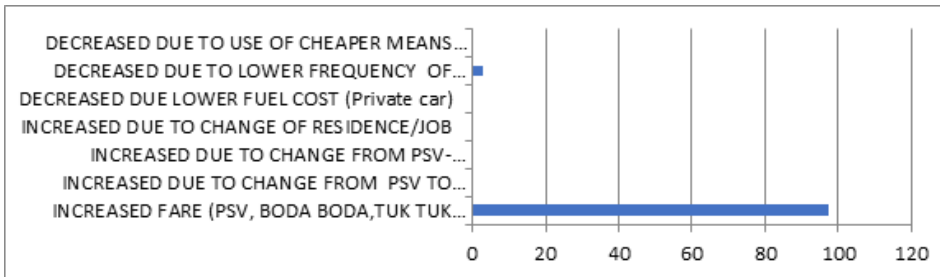
Figure 6.1: Main means of transport



Source: KNBS COVID-19 Impact Survey 2020

The KNBS COVID-19 Impact Survey 2020 revealed that 41.45 per cent of the population reported a change in the cost of travel/commute, Figure 6.2. The expenditure on transport increased by 60.58 per cent from Ksh 104 before February 2020 to Ksh 167 in May 2020 for a one-way trip. The main change (97.3%) in transport cost was attributed to increased fares for PSV, Boda-boda and Tuk-tuk.

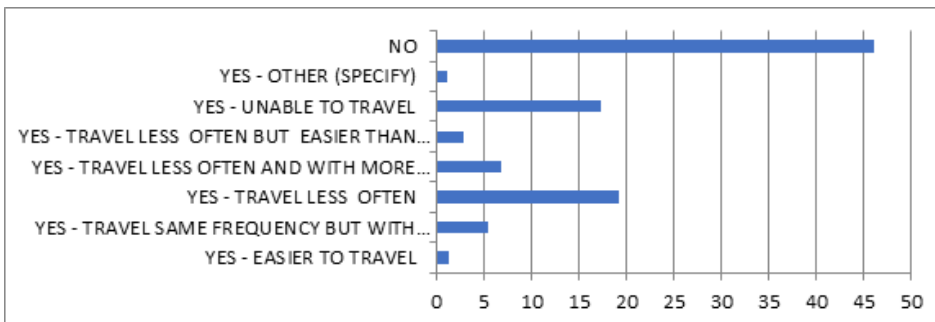
Figure 6.2: How has the cost of your MAIN travel changed



Source: KNBS COVID-19 Impact Survey 2020

Residents had changed their travel patterns with 19.19 per cent of the population travelling less often, while 5.37 per cent travelled with the same frequency but with some difficulty, and 17.26 per cent were unable to travel. However, 46.04 per cent of the population did not change their travel pattern, Figure 6.3.

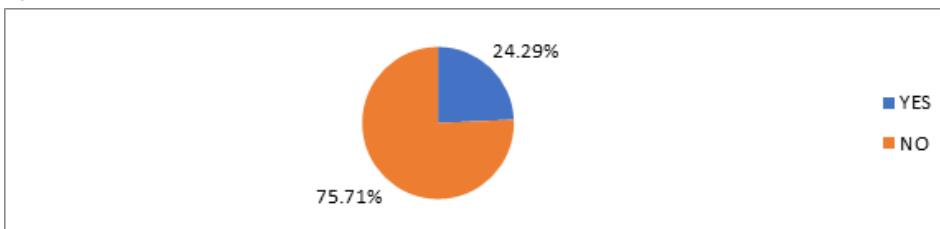
Figure 6.3: Change in travel patterns



Source: KNBS COVID-19 Impact Survey 2020

The pandemic has affected delivery of goods and services for 24.29 per cent of households

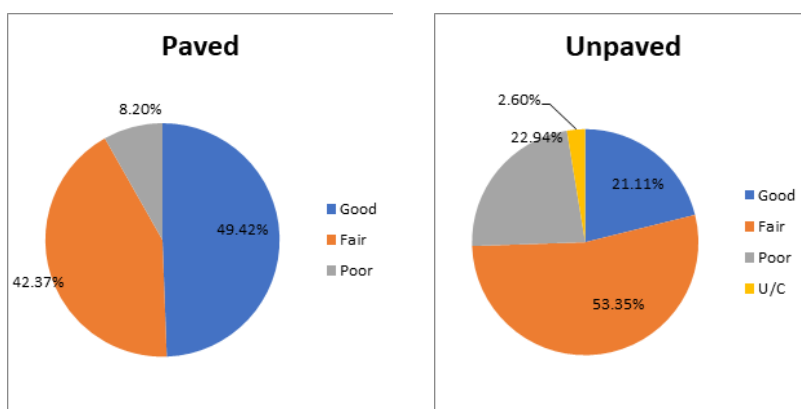
Figure 6.4: Has delivery of your household goods and services been affected by COVID-19?



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

The County was allocated a total of Ksh 164,948,954 from the Road Maintenance Levy Fund towards road maintenance in the Financial 2017/18 (OCOB, 2019). The county has a total of 1,046.84 kilometres of classified road network. The paved County road network covers 27.15km, while the paved National roads cover 125.31km. Out of the total paved road network of 152.46km, 49.42 per cent is in good condition, 42.37 per cent in fair condition and 8.2 per cent in poor condition. The unpaved road network in the county covers 518.06km (county roads) and 74.52km (National roads), of this, 21.11 per cent is in good condition, 53.35 per cent fair and 22.94 per cent in poor condition as depicted in figure 6.5 (KRB, 2019).

Figure 6.5: Road condition mix-classified road network



The unclassified road network in the County covers 301.80km, with 242.8km of narrow roads, that is, road with a reserve of between 4-9 meters, while there is a total of 59km 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 road⁷. The county has a RAI of 91 per cent which is above the National Average of 70 per cent, indicating that access to transport in rural areas is above average (KRB, 2019). This has positive implications regarding sectors that rely on accessibility such as agriculture, trade and overall development. The road condition mix of the unpaved network at 23 per cent is a constraint to development.

6.1.2 Opportunities with COVID-19 on transport

With reference to the 8 point stimulus programme by the National Government⁸ and resources allocated to road development and maintenance, the County has the opportunity

⁷ RAI defined : <https://datacatalog.worldbank.org/dataset/rural-access-index-rai>.

⁸ 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/>.

to strategically improve the road network for economic development, while creating jobs for youth, women and vulnerable groups as espoused in the Roads 2000 programme⁹ 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) approach¹⁰ offers a strategic and cost-effective approach to improve rural accessibility in the County.

6.1.3 Emerging Issues

The cost of transportation has increased due to reduction in maximum number of passengers allowable in public service vehicles. The county government is rehabilitating the road network.

6.1.4 Recommendations

- i) Apply labour-based and local resource-based approaches for road development and maintenance, where technically and economically feasible, in line with the Roads 2000 national policy¹¹.
- ii) Focus on increasing the share of unpaved roads in good and fair condition to above 62 per cent which is the national average. For the unpaved road network, focus on adopting the Low Volume Sealed Roads (LVSR) technology for greater network coverage cost effectively.
- iii) Improve and expand infrastructure for Non-Motorized Transport (NMT) in urban areas and along roads with heavy-highspeed 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 Goals¹².
- iv) Adopt climate smart road engineering designs to safeguard road and bridge infrastructure from floods and to harvest storm water for irrigation and productive use. Use the Kenya Urban Support Programme funding to build storm water management systems in urban areas.
- v) Apply performance Based Contracting for road development and maintenance.
- vi) Sensitize PSV and boda boda operators on COVID-19 prevention measures and assist vehicle owners in retrofitting the seating designs.

9 Roads 2000 programme [http://krb.go.ke/our-downloads/roads per cent202000 per cent20strategic per cent20plan.pdf](http://krb.go.ke/our-downloads/roads%20per%20cent202000%20per%20cent20strategic%20plan.pdf).

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

11 Roads 2000 programme [http://krb.go.ke/our-downloads/roads per cent202000 per cent20strategic per cent20plan.pdf](http://krb.go.ke/our-downloads/roads%20per%20cent202000%20per%20cent20strategic%20plan.pdf).

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

Table 6.1: Transport sector COVID -19 plan

sector issue	COVID -19 effects/ impacts	interventions	proposed activities	sector	sector issue
<ul style="list-style-type: none"> Sustainable & Resilient infrastructure development Energy production and usage 	<ul style="list-style-type: none"> Delayed implementation of infrastructural projects: <ol style="list-style-type: none"> Disruption in supply of factor inputs (K, L&T) (Import dependence) Increased material costs Reprioritizing & re allocation of projects fund Increased cost of transport services Disruption in supply networks and travel restrictions Reduced demand for fuel products (reduced industrial consumption) Increased demand for digital infrastructure (<i>Work at home</i>) 	<ul style="list-style-type: none"> Re designing of infrastructure projects implementation –rescheduling Promote use of local materials in building and construction Promote health infrastructure development Investment in telecommunication and connectivity Review public transport protocols 	<ul style="list-style-type: none"> Re negotiate contracts terms for huge capital projects – flexibility Import substitution for construction materials Subsidize LPG gas and renewable energy – (encourage cooking & stay at home) 	<ul style="list-style-type: none"> Infrastructure expansion to allow social distancing 	<ul style="list-style-type: none"> Rehabilitation and expansion of roads in urban centers Redesign and implement priority infrastructure projects that is COVID -19 resilient. Construction and rehabilitation of key roads and bridges

Source: County Government of Vihiga

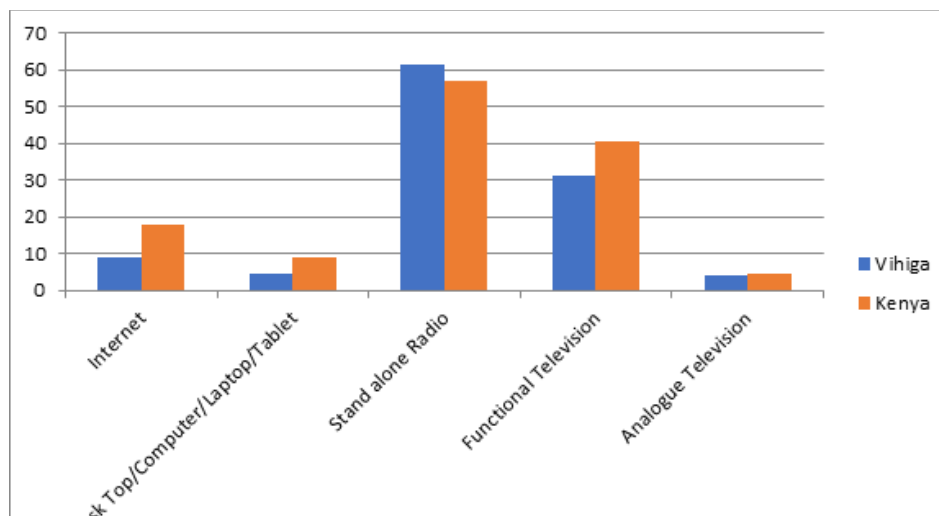
6.2 Information and Communication Technology

The ICT network coverage is low. The county is constructing a documentation centre to be used by all county government departments.

6.2.1 Characteristics of the sector

The analysis of the 2019 KPHC reveals that only 8.8 per cent of the conventional households in the county ‘own’ internet with 4.3 per cent owning a desktop, computer laptop or tablet. Internet access, ICT device ownership and TV ownership are 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 KPHC 2019

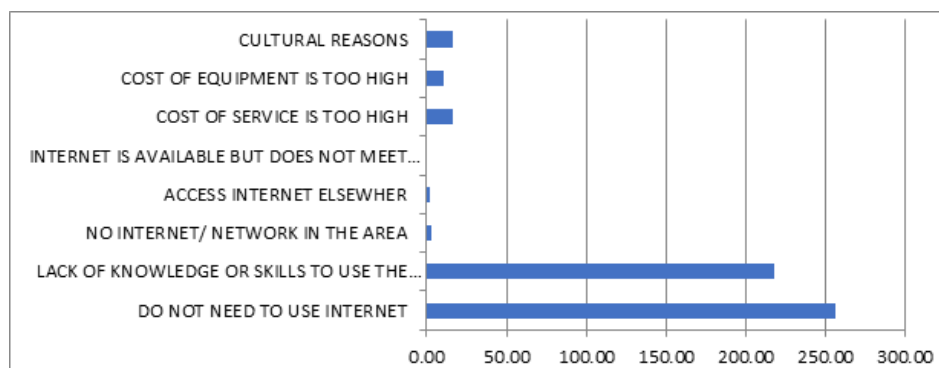


Source: KNBS, 2019-Kenya Population and Housing Census

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 (2.7%) than women (1.7%) 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 do not 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: Why doesn't this household have any type of Internet connection? KHIBS 2015/16

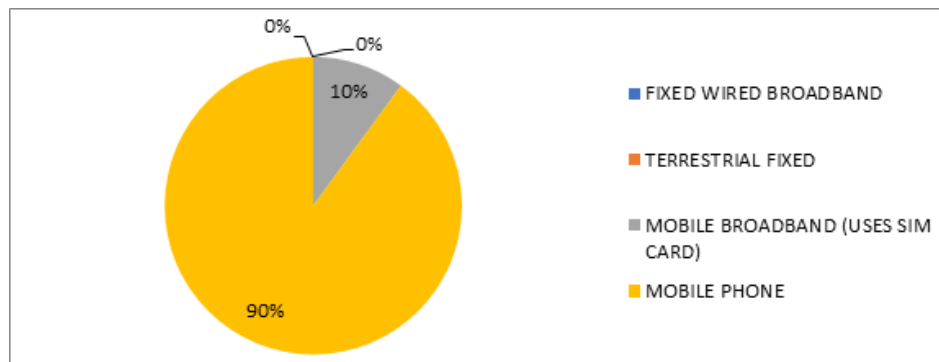


Source: KIHBS 2015/16

Approximately 90 per cent of the internet users in the county rely on mobile phone for

connectivity, with a marginal population of 10 per cent relying on mobile broad band that uses a sim card for connectivity, figure 6.8.

Figure 6.8: Type of internet connection



Source: ICT Data 2020

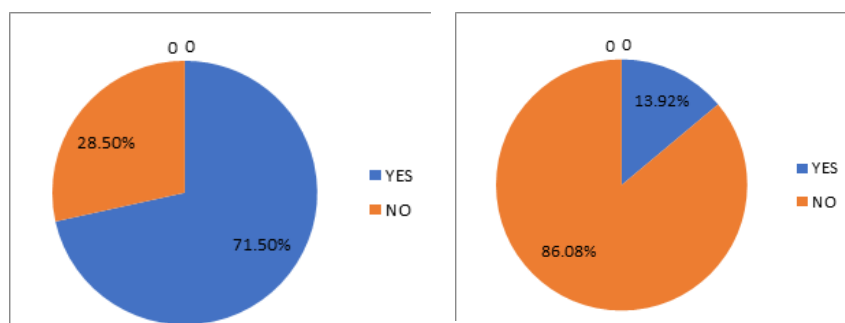
Approximately 43.1 per cent of the population aged 3 years and above own a mobile phone which is lower than the national average of 47.3 per cent.

Approximately 71.5 per cent of the people in the county have a mobile money subscription compared with only 9.48 per cent that have a mobile money banking platform subscription (KHIBS 2015/16)

Figure 6.9: Mobile money transfer subscription and Mobile money banking platform Subscription

Mobile money transfer subscription
KHIBS 2015/16

Mobile money banking platform Subscription
KHIBS 2015/16



Source: KHIBS 2015/16

The county experience gender divide in use of internet and ICT devices as well as mobile money subscriptions. Both internet and ICT device use is higher among the male with 15.8 per cent of the men and 12.5 per cent of the women using Internet, while 7.5 per cent of the men and 5.7 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.
- The county has poor ICT network
- Households perceive that they do not need to use the internet,
- Households lack knowledge and skills on internet

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.

6.2.2 Opportunities with COVID-19 in the sector

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

6.2.3 Recommendations

- i) Support programmes in partnership with the private sector that will enable households acquire ICT assets such as smart phones and laptops and increase mobile phone ownership from 43.1 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony¹³
- ii) Speed up the construction of fiber-optic broadband networks in underdeveloped areas and improve the enthusiasm of telecom companies to upgrade and improve the communication networks in remote areas. Adopt programmes to ensure ubiquitous access to reliable and affordable internet (internet everywhere) by applying aerial and satellite-based communication technologies.
- iii) Harness the power of technology and use innovative solutions to bridge the gender digital divide. Negotiate with the public primary schools for community access to ICT infrastructure and collaboratively build and equip youth empowerment, ICT centres and ICT laboratories as provided in the CIDP. The IT personnel in public primary schools can be deployed to support the development of ICT competence and skills among the public.
- iv) Enhance internet connectivity to public buildings and key trade centres to boost

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

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.

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

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

7. Housing and Urban Development

Affordable housing has not been implemented in the county only a few selected vulnerable groups that have had their houses upgraded by the county from thatched houses to hospitable homes. Approximately 25 selected homes benefit per year.

There are five urban centres in the County with a total population of 47.9 per cent males and 52.1 per cent females, table 7.1. The urban land area covers 27 square kilometers with a population density of 2152 persons per sq.km

Table 7.1: Distribution of population by Urban Centers by gender

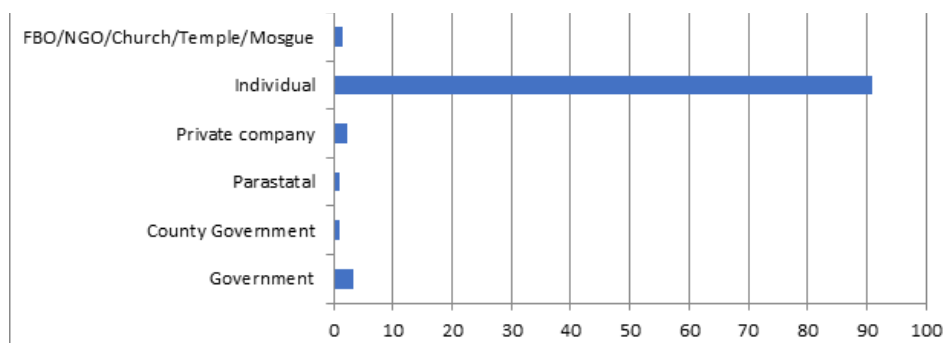
COUNTY	URBAN CENTRE	TOTAL	MALE	FEMALE
Vihiga	Mbale	17,404	8,263	9,141
Vihiga	Luanda	13,319	6,354	6,963
Vihiga	Chavakali	12,674	6,073	6,601
Vihiga	Majengo	11,913	5,785	6,128
Vihiga/Nandi	Serem	3,984	1,923	2,061

Source: KNBS, 2019- Kenya Population and Housing Census

7.1 Characteristics of the Sector

The housing tenure is predominantly owner occupied at 88.1 per cent, with 11.9 per cent of the households under rental tenure. Individuals are the primary providers of rental housing at 91.0 per cent, followed by National Government (3.3 per cent); and Private Companies (2.4 per cent); For those who own homes, 96.6 per cent constructed the houses while 0.5 per cent purchased the house and 2.9 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 (58.2%) compared to women (41.8%) in the County (KIHBS, 2015/16).

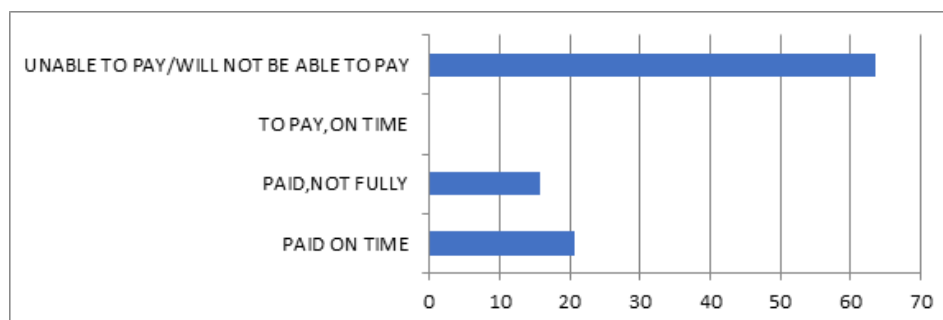
Housing quality

On average, the main dwellings of houses in the County have 3.7 habitable rooms against an average household size of 5.05 persons in a household, translating to approximately 1.36 people per room. According to the UN-Habitat, overcrowding occurs when there are more than three people per room¹⁴. In terms of housing quality (building material), 31.93 per cent of houses are constructed using finished materials for walls, floor and roofing compared to 68.07 per cent constructed using rudimentary materials (KIHBS, 2015/16). Majority of households (97.4%) have iron sheets for roofing, mud/cow dung walls (70.4%) and dung floors (50.7 per cent) (KNBS, 2019).

Rent payment

On average, rental households spend approximately Ksh 4637 on rent with a minimum of Ksh 1,000 and the maximum of Ksh 15,000 (KNBS, 2020b). The county recorded a rent to income ratio of 14.62 per cent, which is within the acceptable threshold of 30 per cent (KNBS, 2012/13).

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

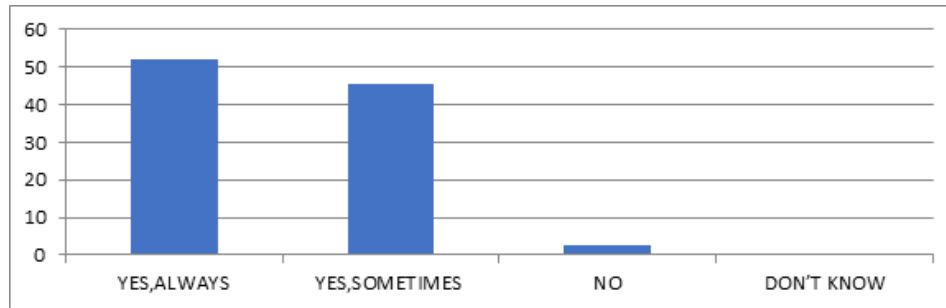


Source: KNBS COVID-19 Impact Survey 2020 wave 2

With the advent of COVID-19 pandemic, households’ ability to pay rent has been affected, with 63.66 per cent of the population indicating inability to pay rent on the agreed date for April 2020, Figure 7.2, compared to 20.67 per cent of the population that were able to pay rent on the agreed date and 42.7 per cent who paid rent on agreed date before COVID-19 pandemic, Figure 7.3.

¹⁴ Household crowding measure: [https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/#:~:text=Overcrowding per cent20occurs per cent20if per cent20there per cent20are,per per cent20habitable per cent20room per cent20\(88\).&text=Crowding per cent20occurs per cent20if per cent20there per cent20is, per cent20Drooms\) per cent20\(89\).](https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/#:~:text=Overcrowding per cent20occurs per cent20if per cent20there per cent20are,per per cent20habitable per cent20room per cent20(88).&text=Crowding per cent20occurs per cent20if per cent20there per cent20is, per cent20Drooms) per cent20(89).)

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



Source: KNBS COVID-19 Impact Survey 2020 wave 2

The main reason that has made households unable to pay rent was attributed to reduced incomes /earnings, reported by 53.97 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.

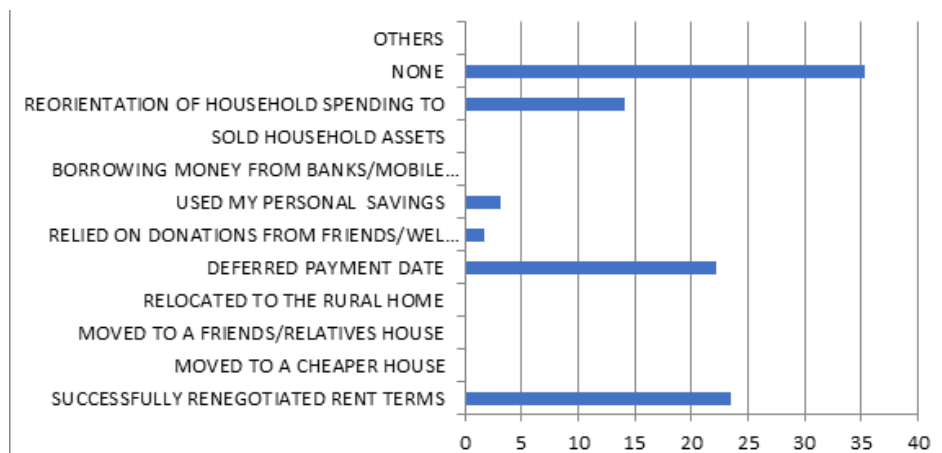
Figure 7.4: What is the MAIN reason that has made your household unable to pay rent?



Source: KNBS COVID-19 Impact Survey 2020 wave 2

Majority of the households (45.99 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 7.27 per cent reporting a partial waiver and 0 per cent reporting a full waiver. To overcome the effects of Corona virus on payment on rent, majority 23.52 per cent of households renegotiated rent terms, while 35.29 per cent of households did not take any measures. Approximately 3.19 per cent used personal savings to pay rent, Figure 7.5.

Figure 7.5: What measures has your household taken to overcome the effects of Corona Virus – rent



Source: KNBS COVID-19 Impact Survey 2020 wave 2

Regarding primary energy source for cooking, 92.11 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
- Construction of affordable housing units is planned, but no projects has started yet.

7.2 Opportunities with COVID-19 on 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.
- The county is implementing a programme to support vulnerable households by replacing their grass thatched houses. Currently constructing 25 houses per year

7.4 Recommendations

- i) Fast-track implementation of the affordable housing programme with a focus on improving living conditions and building quality applying finished materials for walls, floors and roofing.
- ii) Avail appropriate building technology for use by the public in house construction and improvement in every sub-county, that responds to local cultural and environmental circumstances.

- iii) Identify and designate urban centres for upgrade pursuant to provisions of the Urban Areas and Cities (amendment) Act, 2019.
- iv) Formulate and seek approval of urban development plans and development control policies to support investment and development of urban areas.
- v) Adopt programmes aimed at an increasing household access to clean energy sources and technologies for cooking to mitigate against exposure to respiratory diseases.

Table 7.2: Lands, Housing and Urban Development COVID-19 plan

Sector	Sector Issue	COVID -19 EFFECTS/ IMPACTS	INTERVENTIONS	PROPOSED ACTIVITIES	Sector	Sector Issue
Urban Development planning and Lands	<ul style="list-style-type: none"> • Population surge • Physical planning approvals 	<ul style="list-style-type: none"> • Increased informal urban settlements (slums) • Congestion in urban places and public facilities (virus contagion risks) • Delays in construction approvals (in light of COVID -19) 	<ul style="list-style-type: none"> • GIS Mapping and spatial planning for physical infrastructure • Digitization of land of transactions 	<ul style="list-style-type: none"> • Master plan for physical development of critical public utilities 	<ul style="list-style-type: none"> • Housing regulations on lighting and aeration 	<ul style="list-style-type: none"> • Data mapping of population distribution, trends and use of physical public facilities

Source: County Government of Vihiga

8. Tourism

8.1 Characteristic of the Sector

The main tourist attractions in Vihiga County include nature-based tourism (Maragoli and Bunyore Hills, Mungoma Caves ideal for adventure, hiking and ecotourism); Cultural and heritage tourism (the county also has a rich culture which can create an opportunity for the development of cultural tourism, as well as diverse talent for sports and celebrity tourism; the Rainmakers Shrines at Esibila, and Wagevere Rocks embossed with ‘footprints of Jesus’ in Matsigulu); Agro-tourism and ecotourism (Kibiri and Kaimosi forest complex; Mudete Tea Factory and Wetland); and medical tourism (visiting herbalists and traditional medicine men).

There are no star-rated hotel facilities in Vihiga County. However, there are 7 registered hotels that are easily accessible and distributed across the county. There is great opportunity to invest in luxury hotels to tap into the high-end tourist market, and campsites to target backpackers and adventure tourists.

The main tourist attractions in Vihiga County include the following:

- ***Physical attractions / nature-based tourism:***
- Maragoli and Bunyore Hills, Mungoma Caves ideal for adventure, hiking and ecotourism
- ***Cultural and heritage tourism:***
- The county also has a rich culture which can create an opportunity for the development of cultural tourism, as well as diverse talent for sports and celebrity tourism.
- The Rainmakers Shrines at Esibila, and Wagevere Rocks embossed with ‘footprints of Jesus’ in Matsigulu.
- ***Agro-tourism and ecotourism:***
- Kibiri and Kaimosi Forest Complex
- Mudete Tea Factory and Wetland
- ***Medical tourism:*** visiting herbalists and traditional medicine men

There are no star-rated hotel facilities in Vihiga County. There are several hotels, easily accessible and distributed across the county. They include Sosa Cottages, Roddy’s Green Lounge, Broadpark Hotel, Hemara Hotel, Hermoso Hotel, Mago Guest House and Luanda Oasis Hotel. There is great opportunity to invest in luxury hotels to tap into the high-end tourist market, and campsites to target backpackers and adventure tourists

The raw materials for tourism in Vihiga County are physical attractions, culture and heritage assets. While the key product and services include the Nature-based tourism, culture and heritage tourism.

Constraints faced

- Key annual cultural festivals in the county were postponed due to the COVID-19 pandemic.
- Inadequate entrepreneurial skills, limited land space, inadequate physical infrastructure and limited access to credit facilities are the main challenges that impede the development of this sector.
- Gender inequality limits women participation in the tourism sector.
- Untapped tourism potential
- Inadequate investors in the tourism and recreation sector.
- Declining Cultural heritage
- Inadequate resources
- Lack of knowledge and skills at local level for tourism development
- Natural forest with plenty of fauna and flora; the youth are destroying it in search for charcoal and timber due to unemployment – hence the county government need to scale up control measures.
- Exact number of jobs that have been lost in the tourism sector due to the pandemic is not known.

8.2 Opportunities with COVID-19 in tourism sector

- Improving sanitation aspects in tourism attraction sites and accommodation facilities.
- Promoting domestic and business / M.I.C.E tourism

8.3 Emerging Issues

- Sanitation as a key component in ensuring business continuity in the tourism sector; Accommodation facilities that will meet the re-opening measures for hospitality sector are likely to recover faster from the effects of the pandemic, since tourists – both domestic and foreign – will be concerned about their safety (in terms of contracting the pandemic) first.

8.4 Recommendations

Re-engineering tourism sector in the county will include:

- i) Enforcing high sanitation standards at tourism accommodation and attraction sites; sanitation is emerging as a key component in ensuring business continuity in the tourism sector. Accommodation facilities that will meet the re-opening measures for hospitality sector are likely to recover faster from the effects of the pandemic, since tourist – both domestic and foreign – will be concerned about their safety (in terms of contracting the pandemic) first.
- ii) Tourism infrastructure development: construction of roads to cultural sites; establish a recreation park; rehabilitate tourist sites; construct a county conference centre; establish tourist sites at Maragoli hills, Bunyore hills and Kaimosi forest. Mungoma Caves, Mudete Wetland, Kibiri Forest, Esibila.
- iii) Sensitize the community on the importance of conserving the environment and cultural heritage; establish a tourism information documentation centre; Build capacity among community organizations on tourism management and entrepreneurship. Promote community Based Tourism Organizations.
- iv) Promote establishment of tourist hotels, resorts and equipped cultural centres.
- v) Mobilize resources for tourism, advocate for PPP programs in the sector.
- vi) Strengthen tourism marketing, branding and promotion.
- vii) Coordination of implementation of the budget of the county government.
- viii) Resource mobilization for investments in the tourism sector, e.g. PPP projects.

9. Health

9.1 Characteristics of the Sector

General health provision in the County

The county has one public county referral facility, Vihiga County Hospital at Mbale. The other major health facility is Jumuia Hospital in Kaimosi. There are three level 4 facilities in Sabatia, Hamisi and Emuhaya. There are also 18 health centres, 32 dispensaries and 34 private and mission-based facilities. The average distance to the nearest facility is 5km. The county doctor to population ratio is 1:11,840 against the national doctors to population of 1:16,520. The county nurse to population ratio is 1:1,947. The County Government intends to recruit more nurses to address the gap to move towards the required international standard of 1:1,000.

Table 9.1: Health provision

Year	2018	2019/20
Health facility density		
Primary health facilities	79	122
Hospitals	8	10
<i>Number of health facilities</i>	<i>87</i>	<i>132</i>
Health facility density	1.5	1.9
Bed density		
Hospital beds	866	873
No. of Beds per 10,000 population	13	13
Human resource density		
Total workforce	736	1,749
Human Resources for Health (Technical)	639	911
Number per 10,000 population	12.3	15.0

Source: Ministry of Health (2021)

In 2019/2020, the number of health facilities in the county were 132 which comprised of 122 primary health facilities and 10 hospitals. This was an improvement from a total of 87 health facilities in the previous year, 2018. The number of beds per 10,000 population is 13 as compared to WHO recommendation of 30 beds per 10,000 population. The health facilities and personnel serve a growing population of 590,013 people according to 2019 census. In 2019/20, total health workforce was approximately 1,749 representing 15 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 Vihiga County (%)

Type of Health Provider	Percentage Distribution of the Population
Government hospital	10.0
Government health centre	22.2
Government dispensary	38.7
Faith Based (church, Mission) Hospital / Clinic	8.8
Community Health	2.0
Private hospital / clinic	16.6
Nursing/ Maternity Home	0.0
Pharmacy/ chemist	0.8
Community health worker	1.1
Shop/ Kiosk	2.7
Traditional healer	1.1
Faith healer	0.2
Herbalist	0.2
Other	0.3
Number of Individuals ('000)	142

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 at 38.7 per cent followed by those who visited government health centres and private hospitals at 22 per cent and 16.6 per cent, respectively. About 10 per cent visited government hospitals, while 8.8 per cent visited Faith Based (church, Mission) Hospital / Clinic.

Population with health insurance cover

The percentage distribution of the population with health insurance cover by type of insurance provider is presented in Table 9.3. In general, 14.3 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 94.8 per cent of the population. Employer contributory insurance cover was reported by 1.0 per cent of the population. Private contributions to insurance cover were reported by 3.1 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)	627

Share of population with health insurance (%)	14.3
NHIF	94.8
Private-Contributory	3.1
Private-Non-Contributory	1.8
Employer-Contributory	1.0
Employer-Non-Contributory	2.7
Other	0.0
Number of Individuals ('000)	89

Source: KIHBS 2015/16

Place of delivery

In the 2015/16 KIHBS, women in Vihiga 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 24.8 per cent of children were delivered at home which is below the national percentage of 31.3 per cent. The proportion of children born in hospitals, health centres, dispensary/clinics was 42.9 per cent, 22 per cent, and 6.9 per cent respectively.

Table 9.4: Proportion of Children aged 0-59 Months by Place of Delivery (per cent)

Place of Delivery	Proportion of Children aged 0-59 Months by place of delivery (per cent)
Hospital	42.9
Health Centre	22.0
Clinic/ Dispensary	6.9
Maternity Home	1.1
At Home	24.8
Other	0.3
Not stated	2.0
Number of Individuals ('000)	68

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 57.3 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 8.1 per cent were fully immunized against measles at 18 month.

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

		Proportion of Children
Vaccination Card	Yes Seen	73.6
	Yes, Not Seen	23.6
	No	2.0
	Not stated	0.8
Measles Vaccination	Measles I (At 9 months Card)	57.3
	Measles II (At 18 months Card)	8.1
	Measles II (Mother/ Guardian memory)	21.8
	Either (card or memory)	79.1

Source: KIHBS 2015/16

Health outputs

The commonest causes of morbidity and mortality in the county includes Malaria, HIV and AIDS related illness, upper and lower tract infections, and diabetes, hypertension, cancer, diarrhea and skin diseases. HIV prevalence rate is 4.7 per cent against the national figure of 5.6 per cent. The most infected age group the age bracket is of 15-49 years with women being the most affected. Malaria prevalence rate is 27 per cent, diarrhoea 5.4 per cent, respiratory diseases (upper and lower), and skin diseases 19.3 per cent. The high prevalence of malaria can be attributed to the fact that 43.2 per cent of children less than 5 years do not sleep under treated mosquito nets. Other factors that contribute to morbidity include consumption of contaminated food and water, adverse weather conditions, poor nutrition as well as accidents involving motorcycles and assaults related injuries.

Malnutrition is an outcome of complex interaction of many factors which include disease, childcare, and food intake. The interactions of these factors lead to stunting, wasting and conditions of micronutrient deficiencies in children. In the county, 5.9 per cent of the total population of children under the age of five are underweight, 23.5 per cent are stunted and 2.6 per cent have wasting condition.

Immunization of children is crucial to reducing infant and child mortality. The immunization coverage for the county for the children under 5 is 94.4 per cent according to KDHS 2014. The maternal mortality ratio in the county is 344 per 100,000 live births against the national 362 per 100,000 while infant mortality is 60 per 1000 lives. This could be attributed to many incidences of home deliveries common in the county, inaccessibility to health facilities, deliveries by untrained birth attendants and inadequate medical staff and equipment.

Table 9.6: Health indicators in Vihiga County

Key Health Indicators	County Estimates
Maternal and Child Services	
<i>Skilled delivery (per cent)</i>	50.3
<i>Children born at home</i>	47
<i>Fully immunized child</i>	94.4
Child Mortality	
<i>Infant mortality (* /1000)</i>	60
<i>Under-5 mortality (* /1000)</i>	0
<i>Neo-natal mortality (* /1000)</i>	0
Nutrition Status	
<i>Stunted children (per cent)</i>	23.5
<i>Wasted children (per cent)</i>	2.6
<i>Underweight children (per cent)</i>	5.9
HIV (per cent)	
<i>HIV adult prevalence (per cent)</i>	5.4
<i>Children with HIV(No.)</i>	0
<i>ART adult coverage (per cent)</i>	72
<i>ART children coverage (per cent)</i>	86

Source: KDHS 2014, KIHBS 2015/16

Vihiga county has Kaimosi Friends University college and several vocational training centres where the youths attain skills. These includes Boyani Vocational Training centre, Ebusiralo Vocational Training centre, Friends college Kaimosi Institute of technology, Givigoi Vocational Training centre, Keveye Vocational Training centre, Maseno youth polytechnic, Muhundu Vocational Training centre, and Nzalwa vocational training centres.

According to 2014 KDH, total fertility rate for the county was 4.5 children per woman in 2014. This is above the national average of 3.9 per woman. The report further indicates that only 60 per cent of the married women were using contraception compared to 58 per cent nationally. The proportion of births assisted by a skilled provider is 50 per cent compared to national average of 62 per cent. The HIV/AIDS prevalence rate in the county is 3.8 per cent compared to the national rate of 6.4 per cent. About 90 per cent of the children 12-23 months in the county are fully vaccinated.

The county realized 110 per cent increase in collection from health care services in 2017/18 of 16.3 million as compared to 15m in 2016/17. This was attributed to the less strikes experienced during this period of nurses and doctors as compared to 2016/17 Financial Year. Due to COVID-19, many people are fearing to visit health centres in fear of infection with the virus. However, 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.

Vihiga County has many active youth groups, having high literacy level among them. However, there is little evidence to show that they undertake regular self-evaluation process. This explains low uptake of new initiatives that could otherwise contribute to their personal and social growth. The county government has set aside funds for the youth willing to join TVETs to learn life skills. The TVETs are in the process of being equipped to enable the youths gain more knowledge in different fields and build a more thorough human resource capital.

Other problems facing youths includes teenage pregnancies, malnutrition, STI/HIV and Aids, poor environment, drug and substance abuse and malnutrition. High cases of STIs and HIV are due to cultural practices and initiation in the Moran where young people are prepared to adulthood and marriage. The young men are put under pressure to engage in unprotected sex with multiple partners. The case is no different for young, circumcised girls who are under pressure to have sex and get married. Teenage pregnancies are as a result of harmful cultural practices which encourages young boys and girls to engage in sex after the circumcision. Young girls are married to old men immediately after circumcision. This leads to majority of girls dropping out of school after getting pregnancy.

Drug abuse has also caused major damages to the young people who indulge in it due to peer pressure. This leads to mental health problems hence dropping out of school and other getting involved in crimes and other social evils such as prostitution. Malnutrition was attributed to high poverty levels in the county whereby people cannot afford food of good nutrients. There is also poor sanitation and lack of water. This catalyze the spread of other diseases such as typhoid and cholera which are causes of morbidity and mortality rates in the county.

The above challenges can be addressed which will help restore the health and education sector. That is by introducing guidance and counselling among the youths, expanding school feeding programmes, starting campaigns against drugs and substance abuse, Provision of clean water, free sanitary pads issuance and health education that promotes positive cultural practices.

Health sector is linked to the agricultural sector, the education sector as well as trade. 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 in reduction of diseases such as cholera, typhoid and other waterborne. This is because my maintaining good hygiene such as washing hands after visiting toilets, washing fruits before eating and boiling/treating drinking water.

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

Effects of COVID-19

As of 27th July 2020, Vihiga county has been one of the counties with the lowest numbers of confirmed reported positive cases with the numbers being 12 cases among its population of 590,013 residents amidst national 17,975 (Ministry of Health situational report) bringing the cases per 100,000 population to be at 2. According to the latest report by the council of governors, Vihiga county has been noted among the 12 counties to attain the required number of isolation beds with the county having a capacity of 300 isolation beds.

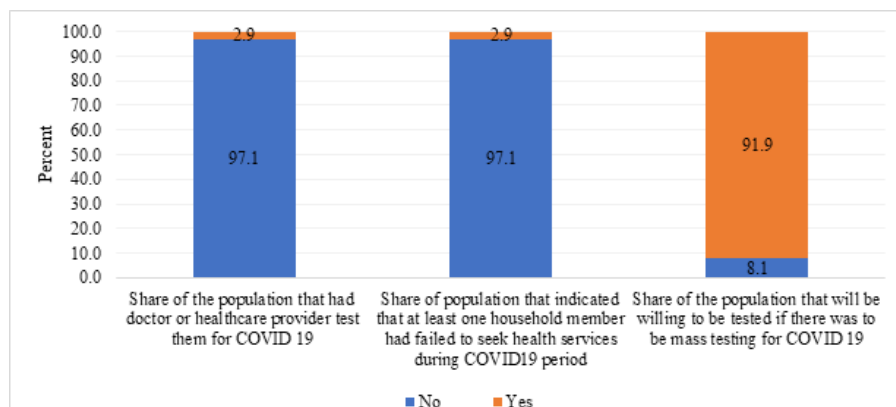
The county has employed additional 300 health co-workers to meet the growing demand for health services. The county is ensuring sustained medical supplies at the health centres. Promoted health insurance coverage for expectant women, maternal health care. Universal Health Care has also been promoted by the county government. The number of beds in isolation centre haven been increased. The county has suspended hospital charges and people encouraged to go for COVID-19 testing free of charge; however, turn out has been low due to fear. There is already re-allocation of Ksh 28 million to health sector to procure the PPE and other items with each department contributing Ksh 1 million. The county further suspended all county government meetings; gatherings; travelling

Due to of COVID-19 fear, have avoided going to the hospital and this has had direct implication on generation of revenues by the health department. The fear might also lead to emergence of diseases that had been controlled such as those that could have been controlled through immunization. Medical personnel shortage is another challenge that is likely to derail delivery of health services. Lack of enough ICU beds and PPEs are also hindrances to the success of fight against COVID-19 in the county.

Various sectors such as the private sectors laid off their workers, the informal sectors have been adversely affected with many rendered jobless. The county workers were working from home in adherence to government directives. The county has also recruited more health workers who have been trained adequately on management of COVID-19 cases.

A survey done by Kenya National Bureau of Statistics 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 2.9 per cent in 2020 (COVID-19, Wave 2 survey). This small number shows that there is a large population of people in the county who have not yet been tested for COVID-19. Further, 2.9 per cent of the population indicated that at least one household member had failed to seek health services and 91.9 per cent of the population indicated they were 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)

9.2 Opportunities with COVID-19 in Health Sector

The COVID-19 pandemic has seen the health sector improved implying the availability of more health facilities in the county and more budgetary allocation for the same which is significant for the sector. It has also created awareness on the need to improve the capacity of the TVET institutions which had also been useful in finding local solution to production of requisite protective gears. COVID-19 had also enhanced the use of technology in transacting various county business online. COVID-19 has also contributed to the ICT development where meetings are being held virtually without physical contacts. Security has also improved in the area due to restricted movement and curfew. It has also created cooperation opportunities among the counties especially the LOREB block.

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

Following the current health status in the county and factoring in the trend in key health sector indicators, the county should adopt the following recommendations:

- (i) The county to revamp, expand, modernize and equip health facilities, including, Vihiga County Hospital and Jumuia hospital and promote training and recruiting adequate number of human resources for health to enable health centres provide equitable essential services throughout an emergency, limiting direct mortality and avoiding increased indirect mortality due to COVID-19.
- (ii) The county to strengthen preventative and promotive health services through malaria control; expanded programmes on immunization; integrated management of childhood illness; and control and prevention of environmentally communicable diseases.
- (iii) The county should provide enough water collection points and water use facilities in the health care facilities to allow convenient access to, and use of, water for medical activities, drinking, personal hygiene, food preparation, laundry and cleaning, also include safe and sustainable drinking water, sanitation and hygiene, and nutrition support initiatives in relevant health policies, strategies and programmes. Mbale town will be given priority in water provision since it hosts key referral hospital among other institutions.
- (iv) The county to create awareness on availability and importance of free maternity services and address other constraints to access of maternal health services in the county while addressing fear of contracting COVID-19 in event of visiting any health facility. This can be done through recruiting voluntary health community workers who are given a stipend at the end of the month.
- (v) Recruit and train more health workers so that they can offer services to all Vihiga County residents without much strain. This will help improve county doctor to population ratio which currently stand at 1:11,840 against the WHO recommendation of 1:230.

10. Education and Training

10.1 Characteristics of the Sector

General Education Provision in the County

The number of early childhood centres was 852, primary schools was 475, secondary schools 157, adult learning centres 107 and technical and vocational training centres 31 in 2007. During the same period, KMTC and Kaimosi University Colleges were established at Mbale and Kaimosi respectively adding to the existing tertiary colleges, namely Eburnangwe University Campus, Friends Kaimosi Institute of Technology, Vihiga, St Joseph's, Goibei and Kaimosi Teachers Colleges. The National Government and other development partners have embarked on the establishment of Vihiga University College at Vokoli in Sabatia Sub-County.

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

The Gross Attendance Rate (GAR) for pre-primary school was 90.9 per cent while that of primary school and secondary school was 112.9 and 75.3 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 females, 97.1 per cent, compared to that for male, 85 per cent. The GAR for primary school was higher for male, 114 per cent, compared to that for female, 111.5 per cent. The GAR for secondary school was higher for males, 77.2 per cent, compared to that for females, 73.2 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 61.4 per cent, 89.7 per cent and 42.3 per cent, respectively

Table 10.1 : Gross Attendance Ratio and Net Attendance Ratio by Educational Level in Vihiga County

Education Level	Gender	Gross Attendance Ratio	Net Attendance Ratio
Pre-Primary School	Male	85	68.0
	Female	97.1	54.2
	Total	90.9	61.4
Primary School	Male	114	92.9
	Female	111.5	85.9
	Total	112.9	89.7

Secondary School	Male	77.2	43.2
	Female	73.2	41.4
	Total	75.3	42.3

Source: KIHBS 2015/16

Basic education gross and net enrolment rate

The pre-primary gross enrolment rate in the county was 102.1 per cent in 2019 and while the net enrolment rate was 61.7 per cent. The Gross Primary and Secondary enrolment rates stood at 116 per cent and 76.9 per cent respectively in 2018 while the Net enrolment rates (NER) were 85.4 per cent and 40.6 per cent for primary school and secondary school respectively during the same period.

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

Preprimary	Total
Gross Enrollment rate (GER) (per cent)	102.1
Net Enrollment rate (NER) (per cent)	61.7
Gender parity index	0.98
Primary	
Gross Enrollment rate (GER)(per cent)	116
Net Enrollment rate (NER) (per cent)	85.4
Gender parity index	0.96
Secondary	
Gross Enrollment rate (GER) (per cent)	76.9
Net Enrollment rate (NER) (per cent)	40.6
Gender parity index	1.11

Source: Education statistical booklets 2014-2018

Enrolments in early childhood education improved since 2013 with current enrolment of 41,278. This can be attributed to improved access to ECD infrastructure and awareness campaigns on ECDE. Enrolment in primary schools has also steadily increased over the last four years (2013-17). The increase in enrolment was due to free primary education policy. Despite the improved enrolments and gender parity in primary schools, an emerging trend of low retention and high dropout remains a challenge in the county. Enrolment in secondary schools has also improved since 2013 with gender parity index of 1:1, other achievement includes the increase in the number of secondary schools. 82.1 per cent of the adult population in county are literate. However, there is need to promote continued learning in the wake of emerging technology. Enrolment in public vocational training centre remains low at a current figure of 2,890 due to the perception that it is only failures that are expected to enroll in these centres or polytechnics.

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 88.5 per cent with the male population being more literate (91.3 per cent) compared to their female counterparts (86 per cent).

Table 10.3: Percentage Distribution of Population aged 15 Years and above by Ability to Read and Write (per cent)

	Ability to Read and Write	Percentage Distribution (per cent)
Overall county	Literate	88.5
	Illiterate	10
	Not Stated	1.5
	Number of Individuals ('000)	367
Male	Literate	91.3
	Illiterate	7.9
	Not Stated	0.8
	Number of Individuals ('000)	171
Female	Literate	86
	Illiterate	11.9
	Not Stated	2.1
	Number of Individuals ('000)	196

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 55.2 per cent of the population do not have any educational qualification. This is high than the national percentage of 49.7. Only 0.9 per cent of the population has attained university degree. The proportion of the population with CPE/KCPE qualification is 26.2 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	55.2
CPE/ KCPE	26.2
KAPE	0.4
KJSE	0.5
KCE/ KCSE	8.9
KACE/ EAACE	0.2
Certificate	3
Diploma	1.9
Degree	0.9
Basic/post literacy certificate	0
Other	0.2
Not Stated	2.3
Number of individuals ('000)	555

Source: KIHBS 2015/16

Percentage distribution of Vihiga 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 58.7 per cent while that of females was 61.2 per cent. Except for primary school level and college (middle level), the proportion of males who had reached other levels of education were comparatively higher than females. For instance, for all persons who reported to have attended school, 9.5 per cent of males and 8.4 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 1 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 Vihiga County (%)

Educational Level	Gender	Percentage Distribution of Population 3 Years and above
Pre-primary	Male	9.5
	Female	8.4
Primary	Male	58.7
	Female	61.2
Post primary vocational	Male	1
	Female	0.9
Secondary	Male	19.5
	Female	22.8
College (Middle level)	Male	6.1
	Female	3.1

University	Male	2
	Female	1
Madrassa / Duksi	Male	0.2
	Female	0.1
Other	Male	0.5
	Female	0.4
Not Stated	Male	2.5
	Female	2.1
Number of Individuals (‘000)	Male	278
	Female	277

Source: KIHBS 2015/16

Slums in town are highly congested with so many school going children living there. Children in rural areas are not able to access virtual classes. The county is consulting with the education team at county level on possible reopening and preparation measures. Children are out of school, and this has increased the risk of child pregnancy. The county has also involved the students in the TVET institutions to develop hand washing booths which have been distributed in the informal settlements.

Loss of jobs due to COVID-19 has severely affected the education sector in the county. Private schools could not sustain the salary for their employees, both teaching and support staffs (casuals). Public schools have also faced challenges in making payment for the other expenses such as electricity and security bills. This because the national government had not released money to the schools. Apart from the other expenses, public schools cannot pay teachers who were hired on contracts and were under BOMs.

Floods affected half of the ECDEs centers and most of the primary schools were turned into evacuation centres. Some schools affected by floods were adversely damaged and their renovations will be needed before the schools reopen. Currently, there is no enough classroom space to maintain the social distancing measures even as schools prepare to reopen in September. Slums in town are highly congested and there so many school going children living in those slums. Children in rural areas are not able to access virtual classes. The county is consulting with the education team at county level on possible reopening and preparation measures. Children are out of school, and this has increased the risk of child pregnancy. The county has also involved the students in the TVET institutions to developed hand washing booths which have been distributed in the informal settlements.

With the many cases of gender-based violence recorded, the county is working on domesticating the child protection policy in addition to the construction of a rescue centre at Hamisi. Youth unemployment is becoming a concern. The county is currently developing sporting infrastructure (3 stadiums) that will help youths to pursue their talents. The county is domesticating the child protection and development policy, whose issues are crosscutting; There is need to look at policies related to gender mainstreaming in the wake of COVID-19 pandemic. GBV and youth unemployment cases are also high in the county.

COVID-19 has worsened the situation to an extent of forcing the closure of schools. Most of the children are now at home idle since no learning taking place. This has contributed to increased cases of pregnancies among the young girls. Other challenges facing youths in the education sector includes drug and substance abuse, poverty, peer pressure, and poor parenting.

Loss of jobs due to COVID-19 has also affected education sector. Private schools that could not sustain the salary for their employees, both teaching and support staffs (casuals). Public schools have also faced challenges in making payment for the other expenses such as electricity and security bills. This is because the national government had not released the money to the schools. Apart from the other expenses, public schools cannot pay teachers who were hired on contracts and were under BOG.

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

As the schools prepared to re-open the opportunity was created for revenue collection. However, the collections from the market, SMEs and agricultural produce forms the basis of own revenue. Even after reopening of schools, private schools will still be struggling to come back to the feet as many of them had suffered huge losses. There is a likelihood that some of the schools will close permanently unless the government comes for their rescue.

There is need for the county to input more resources in the education sector, through increased budgetary allocation, to facilitate the re-opening of learning institutions.

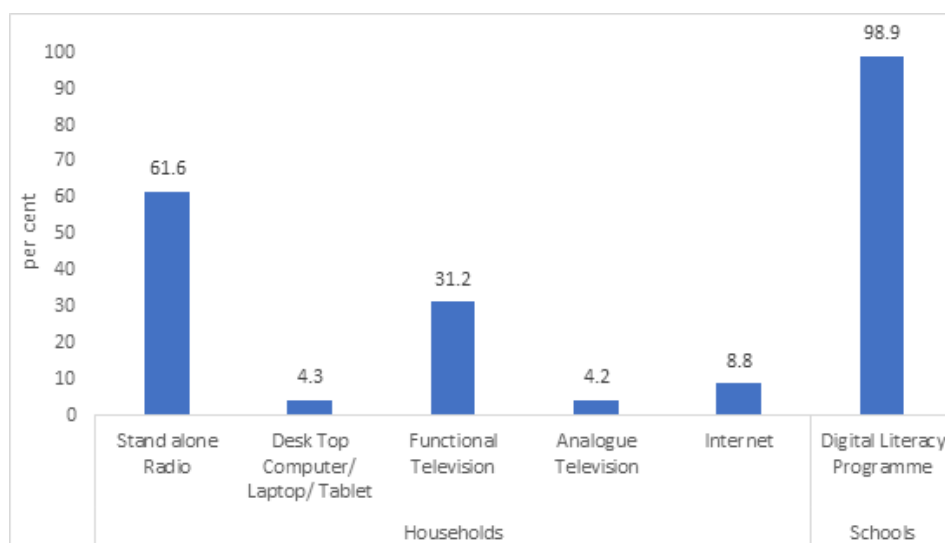
Water is a shared commodity between community and the schools. The county government should ensure that all learning institutions have water for proper hygiene during this COVID-19 period. School uniforms and learning materials such as books are provided by parents. Schools should make sure that there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

The main constraint facing education sector right was COVID-19 which led to closing of schools. This has disrupted education calendar posing a great challenge to both county and national government. The national government announced that the education calendar 2020 a waste. Closure of all schools has led to loss to learning time and teaching time. The school infrastructure in the County is not only limited but also is of poor quality. High Illiteracy level is another issue of concern as not all county persons can read and write. Additionally, there is challenge of poverty among many school going children. Some used to eat from schools in the school feeding programs some of which were supported by donors and NGOs. Lack of parental guidance and early marriages are other challenges being experienced.

ICT in education

There is lack of enough ICT infrastructures in the county making it difficult for the online learning to take place (figure 10.1). The county has also low internet access (9.1 per cent) which constrains online learning across the County. Furthermore, only a small per cent of the households had access to ICT equipment such as laptops and computers. This makes it difficult for the pupils and other students to benefit from national learning programme which had been started by the government. Even if the programme was to be done through radio, it would be difficult since only 59.8 per cent of the county population has a radio. Another challenge is the inability of the private schools to sustain their teachers while they are not in operation.

Figure 10.1: Access to ICT in Households and Schools



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

Line Ministries and Departments such as Health, Ministry of Education and Development Partners like UNICEF, AMREF are involved in Child immunization through multi-sectorial approach. In addition, Through ICT, other children within the county have managed to continue with their schoolwork at home. Health is concerned with operation of education sector as it defined the guidelines on the measure to put in place in preparation to re-open schools under the new normal. Education is also directly linked to agriculture sector to enhance food security. Some of school dropout cases are due to lack of food. That is why agriculture comes in to provide food for the students enabling them to concentrate in classes.

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 youths. It will however be important to address issues of standards and quality of the local produced PPEs. COVID-19 pandemic has also

provided opportunity for the county government to forge partnerships to ensure enough network coverage across all the sub-counties and counties in the Lake region. There is also the opportunity of exploring online classes. This if effective, can save time spent on travelling from home to schools to teach. Teachers will be able to reach at the comfort of their seats. This can reduce the cases of lateness and absenteeism. Learning from homes will also reduce accidents and injuries among pupils at school. It will also reduce indiscipline and drug abuse as parents will be able to closely monitor their children at home. The disease has also created an opportunity for creativity among students who are involved in making of ventilators and researching on vaccines.

10.3 Emerging Issues

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

10.4 Recommendations

- (i) The County with support from stakeholders should continue to invest in early childhood development through infrastructural development 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 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 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.

11 Social Protection

11.1 Characteristics of the Sector

Sources of vulnerabilities in the County

Vihiga County has an estimated number of 20,000 PWDs (3.8%) and 7.5 per cent older persons aged 65 years and above as shown in Table 11.1 below. Overall poverty levels in the county are at 76 per cent, while 36 per cent and 43 per cent of the population is multi-dimensionally and food poor. The proportion of stunted children in the county is 24 per cent of the total population. The county has in place an ongoing programme to provide daily animals to vulnerable groups. So far provided 38 daily cattle / goats. There is an established fund for the disabled, and the county government is mapping PWDs to support them effectively. Through the office of the governor, the county distributed maize and beans in partnership with CDF and other stakeholders. Animal feeds has also been distributed to the vulnerable.

Assorted food bought by the county and other partners was distributed to the vulnerable in the society. To assist the disabled, the county is mapping out all the people living with the disability. The county has recruited more than 300 health workers and increased access to health facility with the vulnerable group placed under a health insurance cover. The county is in the process of opening a rescue centre for survivors of gender-based violence.

Severe Shocks to The Households

Severe shocks have had negative impact to the household's economic and social welfare of county residents. Table 11.1 presents the proportion of households by the first severe shock in the county. The major shock in the county was dearth of livestock and Death of family Member which affected 25.6 per cent and 15 per cent of the households in the county. Household business failure, large rise in price of food and robbery were also other major shocks in the county affecting 8.3 per cent, 5.7 per cent and 6 per cent respectively. Crop disease or crop pests were experienced by 4.7 per cent of households while the 4.8 per cent reported having their livestock stolen as other 4 per cent of the households reported to have experienced Break-up of the households.

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	0
Crop disease or crop pests	4.7
Livestock died	25.6

Livestock were stolen	4.8
Household business failure, non-agricultural	8.3
Loss of salaried employment or non-payment of salary	3.1
End of regular assistance, aid, or remittances from outside the household	5.2
Large fall in sale prices for crops	0.5
Large rise in price of food	5.7
Large rise in agricultural input prices	-
Severe water shortage	-
Birth in the household	3
Death of household head	2
Death of working member of household	1
Death of other family Member	15
Break-up of the household	4
Bread winner jailed	0
Fire	2
Robbery / Burglary / Assault	6
Carjacking	-
Dwelling damaged, destroyed	3
Eviction	-
Ethnic/ Clan clashes	0
Conflict	1
HIV/AIDS	3
Other	17
Number of households with Shock	92,000

Source: KIHBS 2015/16

Distribution of Social Assistance Beneficiaries

Households in the county received various forms of social assistance or transfers or gift either in form of a good, service, financial asset, or other asset by an individual, household or institution. Transfers constitute income that the household receives without working for it and augments household income by improving its welfare. Cash transfers include assistance in form of currency or transferable deposits such as cheque and money orders. The proportion of households that received cash transfers by source, household headship, residence and county is presented in Table 11.2. Overall, 65 per cent of the households received cash transfers. A higher proportion of households received transfers from within

the country (61%), mainly from individuals (81%) while external transfers constituted 43 per cent.

Table 10.5: The proportion of households that received cash transfers by source, and household headship

		Beneficiaries
	Total Number of Households	144,000
	<i>Households receiving transfers (per cent)</i>	65
From Inside Kenya	Individual	17,213
	Non-Profit Institution	1,270
	National Government	1,859
	County Government	471
	Corporate Sector	224
Inside Kenya		21,036
Outside Kenya		296
Total		21,213
Number of households that received transfers		94,000

Source: KIHBS 2015/16

The county has been engaging the youths in the county. It held a Youth Convention where youths were able to air their issues of concern. The county also conducted youth training on entrepreneurship and leadership, trained 30 community group leaders, participated in the international day for persons with disabilities, held 5 sub-county forums for PWD and one children assembly, sensitization of stakeholders on child protection in all sub-counties, carried out guidance and counselling for children and carried out sensitization of parents on proper parenting. Equity Bank (Mbale branch) in collaboration with Car and General Limited today handed over five motorbikes to Cheptulu United Boda-boda Group. These some of the programmes the county government in partnership with private sector are doing to empower youths.

In line with the President’s directive to establish ‘Kazi Mtaani’ at grassroot level to salvage youths during this deadly COVID-19 pandemic time, Vihiga County flagged off the initiative that will see more than 2,500 youths in Vihiga engage in casual works to earn income. The county budgeted some funds for youths in this year’s budget to cushion them against corona virus. In addition to what the National government has offered, the county government has set aside money in the 2020/2021 Financial Year budget for the same purpose. Among the tasks to be executed by the new recruits include Beautification, planting trees, roads

maintenance, maintaining government facilities, solid waste management, cleaning ditches and opening of culverts. In addition, the County economy launched the second phase of Trade and Enterprise Fund. A total of 25 million shillings will be disbursed to groups and individuals in business. The county intends to capacity build the beneficiaries so that they can invest the loans wisely in viable projects.

A Large per cent of Vihiga residents rely on Agriculture especially those in rural areas. Most people in this market are females. Open air markets were closed which mostly serve as place of trade mostly for agricultural products This affected their welfare in terms of finances and access to food and other goods thus lowering their living standards. Fishing has also been affected by the curfew and social distance requirement making it hard for people to trade which serves as a main source of income. This means that they could no longer feed their households members. Other small-scale traders such as those in transport industries like *matatu* and *boda-boda* were affected since the number of passengers they carry per trip was reduced due to introduction of social distance requirements; reducing the amount of income that they could get.

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

The county revenue collection declined because of outbreak of COVID-19. Closing of markets and reduction in businesses time of operation affected business activities and revenue collected by the county government. County will need to capitalize on fishing revenue as the curfew hours have been adjusted. County also needs to diversify its source of revenue by engaging in other activities

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 have also led to increase in poverty and declining of people welfare. With loss of jobs and businesses, most youths are likely to be involved in the activities such as crimes, prostitution, and other social evils. In addition, there is no clear policy in place on how to engage and cushion the youths and other disadvantaged groups in the county.

Agriculture sector, trade and industry, health as well as education. Social protection is directly linked to the health sector. When people's social welfare is good, that is people have good health insurance, they can be able to access health services in case of sickness.

When people welfare is affected by loss of employment and closing of businesses, they are more likely to suffer from diseases such as stress and depression. ICT also plays a key role in terms of information dissemination through media such as radio, television, mobile phones, etc. Communication is key especially for the people in business as one need to place order for goods or services. ICT is also involved in record keeping of those people in schemes such as NHIF and NSSF as well as other insurances.

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

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

11.2 Opportunities with COVID-19 in social protection

COVID-19 pandemic has provided opportunity for the county government to forge partnerships to ensure enough network coverage across all the sub-counties and counties in the LREB region. There is also the opportunity of exploring online classes. This if effective, can save time spent on travelling from home to schools to teach. Teachers will be able to reach at the comfort of their seats. This can reduce the cases of lateness and absenteeism. Learning from homes will also reduce accidents and injuries among pupils at school. It will also reduce indiscipline and drug abuse as parents will be able to closely monitor their children at home. The disease has also created an opportunity for creativity among students who are involved in making of ventilators and researching on vaccines.

11.3 Emerging Issues

The social and economic effects of the COVID 19 pandemic increased households' susceptibility to Gender Based Violence (GBV) in Vihiga county. Response measures taken to contain the COVID 19 pandemic, such as movement restrictions, lockdown, and curfew hours, have led to loss of income, isolation, high levels of stress and anxiety exposing household members to psychological, economic, sexual violence and physical harm as couples spend more time in close contact. Lack of clear policy to cushion youths and vulnerable in the case of pandemics. There is no clear programme of enrolment of the elderly to the programmes such as NHIF. There is an emerging trend of increased teenage pregnancies and HIV cases.

11.4 Recommendations

Through the office of the Governor, the county government needs:

- (i) Undertake research to get a better understanding of the actual situation of all vulnerable groups and persons with chronic illness in Vihiga County, and to map existing initiatives targeting the special interest groups. The county will also carry out baseline survey to establish the population of the elderly persons so that they can be provided with NHIF cover.
- (ii) Build linkages with public and non-state actors and with NGOs that work with people with disabilities to strengthen families, deliver assistive devices, reduce barriers to access and provide vocational training, also design, and implement a disability grant to all those who are severely disabled persons.
- (iii) The county will rescue, rehabilitate, and re-integrate the young street children with their families; and build capacities of the older ones in collaboration with other stakeholders through skills retooling and support to enter labour market; and construct two children rescue centres in Mbale and Chavakali to rehabilitate and train street children.
- (iv) There is need to partner within the regional block to ensure borders are manned and enhance cross border screening especially among long distance drivers dodging main route to Uganda. This would drastically slow the spread of the virus.
- (v) There is need to conduct mass civic education among the people on COVID-19 prevention measures, how to handle an infected person and avoidance of stigmatization of the affected person.
- (vi) There are no clear policies by the county government that aims at cushioning the youths and women from the impacts of COVID 19. Apart from national government of “Kazi Mtaani”, county government need to come up with her own initiatives. Programmes to cushion the vulnerable people need to be put in place.

In Vihiga County, there were 3 girls and 6 women cases of GBV reported in April 2020 based on data from the Healthcare Assistance Kenya (HAK) Helpline 1195. The May 2020 KNBS COVID_19 survey revealed that approximately 9.3 per cent of respondents had witnessed or heard of domestic violence in their communities since the National Government instituted measures to contain COVID-19. Between March -May 2020, there were a total of 1796 cases of adolescents (age 10 - 19) presenting with pregnancy at health facilities based on data from the Kenya Health Information System (KHIS, 2020). To address these challenges, the County will:

- i. Designate gender safe spaces to provide accommodation for Gender Based Violence (GBV) survivors and create space in County Referral Hospitals to serve as GBV recovery centers.
- ii. Enhance community awareness and sensitization on gender inequalities, gender-based violence reporting and prevention and reproductive health.
- iii. Prioritize reporting of GBV cases through help lines such as toll-free calls and SMS numbers for victims.
- iv. Bring onboard key stakeholders to actively engage and sensitize the youth on reproductive health; HIV/Aids and COVID-19 prevention measures.
- v. Establish a multi-sectoral committee that oversees the implementation of gender policies across various cross-cutting sectors.
- vi. Support gender champions and sign language interpreters to activate and communicate an 'alert chain' to reach GBV survivors or those in imminent danger of injury and harm.
- vii. Strengthen inclusive community outreach strategies to ensure GBV messaging is localized and clear, and addresses stigma, discrimination and other power dynamics that serve as barriers to accessing GBV services & COVID-19 information among differently able persons.
- viii. Promote use of alternative means of Gender Based Violence safe outreach and awareness-raising that limit direct contact i.e. using traditional methods e.g. town criers and use of loudspeakers.

12 Labour Participation

12.1 Characteristics of the Sector

Sources of employment in the County

The major Economic Activities that drive Vihiga Economy are Cottage Industries, Subsistence Farming, Tea Farming, Horticulture, Livestock Farming, Wholesale and Retail Trade, Quarrying and Mining. However, the farmers in the county have been greatly affected by COVID-19, mainly because of national lockdowns and social distancing policies. The agriculture sector was experiencing a low traffic on sales and movement of goods, which in turn had an adverse effect on market operations and cash flow for farmers. The export and import restrictions created uncertainty on the tea market, and farmers were undertaking emergency response measures to prevent the spread of COVID-19 in communities, this resulted to loss of jobs and income amongst the farmers.

Drivers of industrialization in Vihiga County include Strategic location, raw materials, existing infrastructure, and regional markets. Industrial potential exists in agro-industrial processing, Meat and dairy and sanitary products. These investments can be supported through additional investments in green energy and business development services for private sector facilitation into industrial zones. All industrial investments can best be undertaken in the proposed County Industrial Park.

Table 12.1: Distribution of Population Age 5 Years and above by Activity Status, and Sex in the County

	Male	Female	Total
Population	250,241	272,418	522,668
Working	114,367	135,752	250,123
Seeking Work/ No Work Available	9,627	5,526	15,154
Persons outside the Labour Force	126,198	131,097	257,299
Not Stated	49	43	92
<i>per cent Working</i>	<i>92.2</i>	<i>96.1</i>	<i>94.3</i>
<i>per cent Seeking Work/ No Work Available</i>	<i>7.8</i>	<i>3.9</i>	<i>5.7</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. A review on county labour force reveals the County population aged 15-64 years (labour force) was estimated at 265,277 people of whom 250,123 were

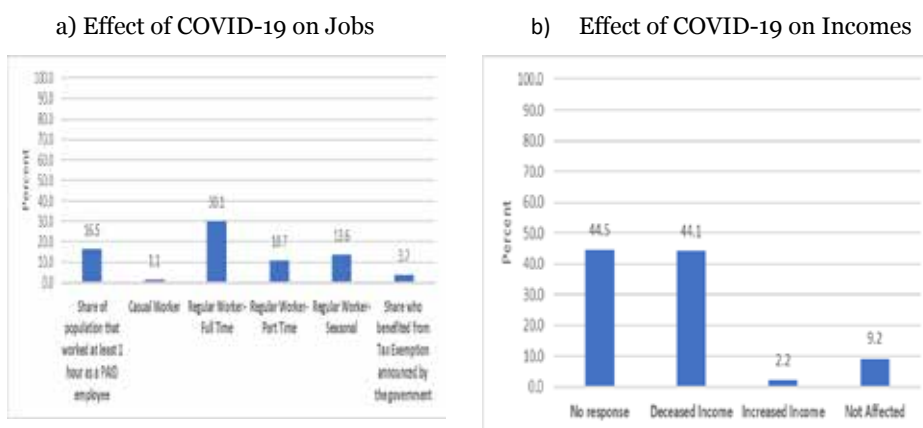
working and 15,154 were seeking work representing an unemployment rate of 5.7 per cent (Kenya Population and Housing Census, 2019). Wage earners Most wage earners in the county are in agriculture and rural development sector of which the agriculture sector provides 70 per cent of employment opportunities. The urban self-employed comprise 4 per cent of the total labour force while 34 per cent of labour force is rural based. The rural population is predominantly self-employed engaging in small scale businesses and farming. The urban self-employment includes those in businesses including shop keeping, hotels, chemists, hair dressing, foodstuff trade, cottage industry among others.

Effects of COVID-19

The unemployment has increased during the period of COVID-19, 16.5 per cent of the county labour force worked at least for 1 hour for pay; 83.5 per cent of employees working without any pay; 21.0 per cent had never worked, and 62.5 per cent worked in the informal sector. However, 6.0 per cent of employees reported to have been absent from work due to COVID-19 related issues. On average, workers in the County lost 10.4 hours per week due to COVID-19.

During the pandemic, about 1.1 per cent of workers in the county were casual workers 30.1 per cent were regular workers (full time), 10.7 per cent employees were working as part time. However, majority of these workers (44.1 per cent) reported decrease in income while 2.2 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 3.7 per cent of workers indicated to have benefited from government tax exemptions which indicates about 96 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.

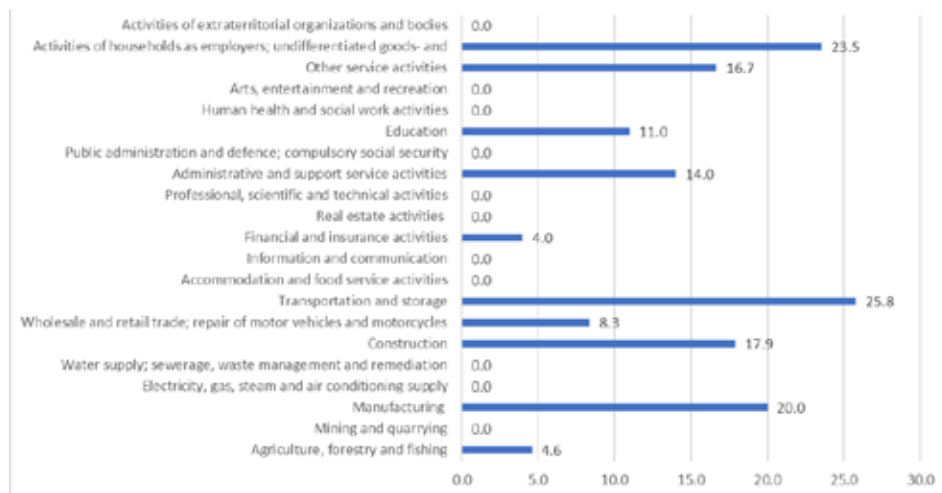
Figure 12.1: Effects of COVID-19, 2020



Source: KNBS, 2020

The COVID-19 had devastating effects on the service sectors, including hospitality, education, and transport sector. All open-air markets in the county were closed. The virus also hit health worker's services. In the administrative sector, Prisons were closed as fear and panic gripped the Mbale prison after an inmate tested positive for COVID-19 leading to isolation of the rest. According to the May 2020 KNBS COVID-19 Survey, the Transportation and storage sector reported the highest level of loss of hours worked (25.8 hours) followed by Activities of households as employers; undifferentiated goods which lost 23.5 hours (figure 3). Workers in manufacturing and construction lost a total of 20 per cent and 17.9 per cent, respectively. Workers in other service activities and administrative and support service activities recorded on average loss of 16.7 hours and 14 hours per week, respectively. The loss of working hours in service sectors which contributes to 50.0 per cent of county GCP will have implications on the county economy both in short and long term.

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



Data source: KNBS, 2020

Workers in the county main economic sectors namely, Cottage Industries, Subsistence Farming, Tea Farming, Horticulture, Livestock Farming, Wholesale and Retail Trade, Quarrying and Mining lost jobs. This was due to closure of markets and strict social distance requirements. About 6.0 per cent of employees did not attend to work with other 83.5 per cent of the employees required to work without a pay with. Following the containment measures put in place by both national and county governments, some other businesses such as bars, hotels, market centres had totally closed, leading to reduced business activities. Workers in the transport sector had also been rendered jobless due to restrictions of moving in and out of Nairobi and Mombasa counties. As a result, majority of workers (44 per cent) reported decrease in income due to the COVID-19. According to the May 2020 KNBS COVID_19 Survey, only 2.0 per cent of people reported to have experienced increased income.

12.2 Opportunities with COVID-19 in Labour Participation

While the “future of work” was well underway before the pandemic, COVID-19 has clearly hastened its arrival as the economic effect of the global pandemic (COVID-19) provides an opportunity for the acceleration of the digitalization processes in the work environment. The county government need to immediately use digital platforms to enable remote access to jobs for their employees where the Human Resource Management will have an essential role to play in navigation of the situation caused by the pandemic. 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 recalibrate its employees and develop strategies (mid- and post-pandemic strategies) to adapt to the evolving reality.

The local productions of masks have provided opportunity for revenue creation. County can increase revenue collection by promoting opening of businesses which had closed while at the same time observing the Ministry of health guidelines in fighting COVID-19. County can also diversify its source of income by encouraging local production of masks and PPEs. This will create employment among the youths and the same time save the county the money it could have used to buy from other countries or counties. Revenue collection department can implement the following measure: revenue automation, training of staff, facilitation of all the department to ensure it is able to implement its projects and activities.

12.3 Emerging issues

The national government in collaboration with county government has started a programme that aims at cushioning the youths who have lost jobs due to COVID-19. The “Kazi Mtaani” project in Vihiga county is aimed at creating employment among the youths under national hygiene programme. Youths are involved in various activities that aims at ensuring clean environment around the main towns

County is not well prepared in terms of response to health-related risks such as the current COVID-19. Opportunities within the 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.

12.4 Recommendations

- (i) Enhance establishment and coordination of agriculture support programmes to farmers e.g. subsidized farm inputs, enhanced credit to farmers and free tea seedlings to support the poor farmers. This will create employment in agriculture sector which is the main source of employment in the county.
- (ii) Introduce Agricultural diversification where people will be involved in growing other crops traditional ones such as black nightshade (lisutsa), jute mallow (mutere) among others as black which are in high demand in urban centres such as Nairobi. They can support farmers in Chavakali, Emuhaya, Vihiga and Cheptulu where crops are doing well.

- (iii) Promote investment and entrepreneurship through provision of loans, Vihiga County will improve access to finance for small and medium enterprises through lending institutions. In addition, build capacity in areas related to marketing, operations, finance, and human resource development to enhance the chances of survival of SMEs.
- (iv) Establish a mentorship programme for youths where they can be offered paid internship in all county offices. This will equip them with necessary skills needed in job market.
- (v) Promote implementation of a stronger labour market interventions and policy reforms that drive employment creation. The County shall deepen technical education, training and skills development.

13 Conclusion and Key Recommendations

13.1 Conclusion

Fiscal policy

The County's main sources of revenue comprise of the transfers from the National Government, Conditional Grants, and its own source revenue (OSR). Total County revenue has significantly grown by 69 per cent from Ksh 3.28 billion in 2013/14 to Ksh 5.54 billion in 2020/21. The amount received in 2020/21 accounted for 84.2 per cent of the annual budget allocation of Ksh 6.58 billion for the County. Budget execution as measured by absorption rate has largely remained above 60 per cent over the review period with the average overall absorption rate at 72.4 per cent. Pending bills have been declining over the review period but remain high with average development related pending bills accounting for 53.6 per cent of pending bills. County wage bill has been growing tremendously at the expense of development expenditure and on average accounted for 46.0 per cent of expenditure, while development expenditure accounting for 25.6 of total county spending.

Agriculture, Livestock and Fisheries

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

Water sanitation and hygiene

The county relies more on water from springs, to minimize the risks of households missing water, it's important to put in place measures to ensure protection of water resources for continuity of access to clean and safe water by households. Similarly, most households do not have access to piped water as well as sewer thus denying the county the much-needed revenues.

Manufacturing, Trade and MSMEs

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

Tourism

The main tourist attractions in Vihiga County include nature-based tourism, cultural and heritage tourism, Agro-tourism and ecotourism and medical tourism. There are no star-rated hotel facilities in Vihiga County. However, there are 7 registered hotels that are easily accessible and distributed across the county. There is great opportunity to invest in luxury hotels to tap into the high-end tourist market, and campsites to target backpackers and adventure tourists. COVID-19 pandemic has affected the tourism sector such as the postponement of the annual cultural festivals in the county

Health

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

Education and training

The County with support from stakeholders will need to continue to invest 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. 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 will be important for the County to promote implementation of appropriate labour market interventions especially those working in the tea sector which is a major employer in Vihiga County and policy reforms that drive employment creation. Deepen technical education, training and skills development.

13.2 Key recommendations

Fiscal policy

There is need to mobilize more finances from OSR to increase the available revenues for budgetary operations. The government to seek for more funding in form of grants from development partners to cater for the critical development projects in the county while ensuring that the ongoing projects are completed before launching new project and clear any pending bills and arrears owed to suppliers.

Agriculture, Livestock and Fisheries

To successfully build resilience and enhance growth of the agriculture sector: explore partnerships to develop agro-processing and value addition capacities at the County; strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural services and build their technical capacity to act on information obtained; and strengthen agricultural cooperatives.

Water sanitation and hygiene

To build resilience and mitigate the effect of COVID-19; 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 stop gap measure against COVID-19.

Manufacturing, Trade and MSMEs

To sustain growth in the manufacturing, trade and MSMEs sector: Collaborate with National government to establish a granite processing plant in the county as per the Third Medium Term Plan 2018-2022 flagship programmes and projects of enhancing mining for development; Consider an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify, and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Related, the County will inject some stimulus to cushion the businesses and traders through affordable credit; waiver of some County taxes, cess, and other charges; COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitizers, hospital beds and ventilators. It is an opportunity to spur innovation

and promote manufacturing and industry development and generation of jobs for the youth; and adopt the new pandemic guidelines including rearranging floor plans to allow for social distancing and maintain high standards of hygiene through having hand washing facilities in manufacturing establishments.

Infrastructure, housing, and urban development

The main means of transport used in the County is motorbike 40.08 per cent, followed by PSV matatus at 28.75 per cent. The paved County Road network covers 27.15km, while the paved National roads cover 125.31km. Out of the total paved road network of 152.46km, 49.42 per cent is in good condition, 42.37 per cent in fair condition and 8.2 per cent in poor condition. The status of ICT access and use in the county is low, especially among households. The housing tenure is predominantly owner occupied. The county has challenges in quality of the housing stock. Approximately 31.9 per cent of houses are constructed using finished materials for walls, floor and roofing, compared to 68.1 per cent constructed using rudimentary materials.

Tourism

The county will need to enforce high sanitation standards at tourism accommodation and attraction sites as sanitation is emerging as key component in ensuring business continuity in the tourism sector. Tourism infrastructure development such as construction of roads to cultural sites and establishing a recreation park will also boost tourism in the county. The county will also need to Sensitize the community on the importance of conserving the environment and cultural heritage to conserve the community's culture and sustain tourism in the county. Accommodation facilities that will meet the re-opening measures for hospitality sector are likely to recover faster from the effects of the pandemic, since tourist – both domestic and foreign – will be concerned about their safety first. There is also a great opportunity to invest in luxury hotels to tap into the high-end tourist market, and campsites to target backpackers and adventure tourists.

Health

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

Education and training

The County with support from stakeholders to invest in early childhood development through infrastructural development; deployment of ECDE teachers; and provision of sanitation facilities. 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

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 will 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.

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