

Socio-Economic Status of Taita Taveta County with COVID-19

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

KENYA INSTITUTE FOR PUBLIC POLICY RESEARCH AND ANALYSIS (KIPPRA)





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Table of Contents

Abl	oreviatio	ns and Acronymsx
Ack	nowledg	gementsx
Exe	ecutive S	ummaryxi
1.	Introd	luction and Structure of Taita Taveta County Economy 1
	1.1	Introduction1
	1.2	Level of Socio-economic Deprivations2
	1.3	Structure of Taita-Taveta County Economy4
	1.4	COVID-19 Caseload and Implications of Mobility Restrictions4
2.	Socio	o-economic Effects of COVID-197
	2.1	Fiscal Policy
	2.2	Recommendations
3.	Agric	ulture Livestock and Fisheries17
	3.1	Characteristics of the Sector
	3.2	Opportunities with COVID-19 in Agriculture Sector28
	3.3	Emerging Issues29
4	Wate	r, Sanitation, and Hand Hygiene31
	4.1	Characteristics of the Sector31
	4.2	Opportunities with COVID-19 in WASH38
	4.3	Emerging Issues38
	4.4	Recommendations
5	Manu	ufacturing, Trade and MSMES40
	5.1	Characteristic of the Sector40
	5.2	Opportunities with COVID-19 in Industrial Recovery and Growth

	5.3	Emerging Issues	56
	5.4	Recommendations	56
6.	Infrast	ructure	··· 57
	6.1	Transport and Roads	··· 57
	6.2	Information and Communication Technology	61
7.	Housin	ng and Urban Development	65
	7.1	Characteristics of the Sector	65
	7.2	Opportunities with COVID-19 in Urban Development	69
	7.3	Emerging Issues	69
	7.4	Recommendations	69
8.	Touris	sm	70
	8.1	Characteristic of the Sector	70
	8.2	Opportunities with COVID-19 in Tourism Sector	71
	8.3	Emerging Issues	71
	8.4	Recommendations	71
9.	Health		72
	9.1	Characteristics of the Sector	72
	9.2	Opportunities with COVID-19 in Health Sector	80
	9.3	Emerging Issues	80
	9.4	Recommendations	80
10.	Educat	tion and Training	82
	10.1	Characteristics of the Sector	
	10.2	Opportunities with COVID-19 in Education and Training	88
	10.3	Emerging Issues	
	10.4	Recommendations	

11.	Social	Protection	89
	11.1	Characteristics of the Sector	89
	11.2	Opportunities with COVID-19 in Social Protection	93
	11.3	Emerging Issues	93
	11.4	Recommendations	93
12	Labou	r Participation	95
	12.1	Characteristics of the Sector	95
	12.2	Opportunities with COVID-19 in Human Resource Sector	97
	12.3	Emerging Issues	98
	12.4	Recommendations	98
13	Conclu	usion and Key Recommendations	99
	13.1	Conclusion	99
	13.2	Key Recommendations	101

LIST OF FIGURES

Figure 1.1: Structure of the county economy, 2013-2017	4
Figure 1.2: COVID-19 cases in Taita Taveta County and the country's mobility stringency	5
Figure 1.3: Effect of COVID-19 in Taita Taveta County economic performance and the nations mobility stringency	
Figure 2.1: Share of county revenues by source	7
Figure 2.2: Annual Own Source Revenue targets and actual collections	9
Figure 2.3: Quarterly Own Source Revenue collection	10
Figure 2.4: County expenditure analysis	11
Figure 2.5: County government expenditure by economic classification (% of total county government expenditure	
Figure 2.6: County approved expenditure and absorption rates	14
Figure 2.7: Profile of county pending bills	15
Figure 3.1: Scale of operation: per cent of households	18
Figure 3.2: Agriculture-related labour force participation	22
Figure 3.3: Changes in hours worked by in agriculture-related occupations	23
Figure 3.4: Limited access to markets to purchase food items	24
Figure 3.5: Reason for limited access to markets/ grocery stores	24
Figure 3.6: Percentage of households experiencing change in food commodity prices	25
Figure 3.7: Proportion of households facing large food price shocks	25
Figure 3.8: Per cent households reporting that the following food items were not readily available in their locality	26
Figure 3.9: Per cent of households where the following strategies were adopted for at least one day	26
Figure 3.10: Percentage of households who experienced the below shocks in the past two weeks the KNBS Wave 2 survey	27
Figure 4.1: Access to sources of water by households in the county	32
Figure 4.2: Access to improved and unimproved sources of water by households	33
Figure 4.3: Volumes of water used by households in a month	34
Figure 4.4: Distance covered by households to and from water sources	34
Figure 4.5: Access and reliability to water sources by households	35
Figure 4.6: Access to sanitation by households	36
Figure 4.7: Access to improved and unimproved sanitation by households	36
Figure 4.8: Number of households sharing a toilet facility	37
Figure 4.9: Access to wash during the COVID-19 period	38
Figure 5.1: Sector of operation in manufacturing	41
Figure 5.2: Manufacturing firms by sector and size	
Figure 5.3: Location of manufacturing firms by premises	42
Figure 5.4: Distribution of manufacturing firms by gender and sector	43
Figure 5.5: Education levels of manufacturing firm owners	44
Figure 5.6: Source of markets	
Figure 5.7: Source of material inputs	45

Figure 5.8: Sources of finance	46
Figure 5.9: Recent sources of credit	46
Figure 5.10: Main purpose of credit	47
Figure 5.11: Constraints faced by manufacturing firms	47
Figure 5.12: Distribution of MSMEs by size	48
Figure 5.13: Sector of operation by MSMEs	48
Figure 5.14: Location of businesses by premises	49
Figure 5.15: Education levels of MSME owners	51
Figure 5.16: Main constraints faced by MSMEs	52
Figure 5.17: Effects of COVID-19 on household non-farm and farm businesses	53
Figure 5.18: Labour dynamics on household non-farm and farm businesses	54
Figure 6.1: Main means of transport	57
Figure 6.2: Change in cost of main means of transport	58
Figure 6.3: Change in travel patterns	58
Figure 6.4: Proportion of residents whose service delivery has been affected	59
Figure 6.5: Road condition mix-classified road network	59
Figure 6.6: Percentage distribution of conventional households by ownership of ICT assets	62
Figure 6.7: Reasons for lack of Internet connection	62
Figure 6.8: Type of Internet connection	63
Figure 6.9: Mobile money transfers subscription and mobile money banking platform	63
Figure 7.1: Distribution of households Renting/ Provided with the main dwelling unit by Provider	66
Figure 7.2: Has your household paid the rent for April 2020 on the agreed date	
Figure 7.3: Proportion of residents paying rent per terms of contract	
Figure 7.4: Reasons for not being able to pay rent	
Figure 7.5: Measures taken by household to mitigate COVID-19 effects on rent	
Figure 9.1: COVID-19 testing, 2020	
Figure 10.1: Access to ICT in households and schools	
Figure 12.1: Effects of COVID-19, 2020	
Figure 12.2: Difference between usual hours worked and actual hours worked during COVID-19	
period	07

LIST OF TABLES

Table 1.2: Population distribution for selected age groups in the County (2019)
Table 1.3: Level of deprivations for the various indicators for multidimensional poverty in the county
Table 1.4: COVID-19 cases in Taita Taveta county and the country's mobility stringency
Table 2.1: Monthly cash transfers from National Government (Ksh million)
Table 2.2: County departmental spending15
Table 3.1: Distribution of households practicing agriculture, fishing and irrigation by county and sub-county
Table 3.2: Distribution of households growing crops by type, county and sub-county18
Table 3.3: Distribution of households growing permanent crops by type and county
Table 3.4: Fruits grown in Taita Taveta County
Table 3.5: Vegetables grown in Taita Taveta County
Table 3.6: Medicinal and Aromatic Plants (MAPs) grown in Taita Taveta County2
Table 3.7: Distribution of households rearing livestock and fish by county and sub-county
Table 5.1: Distribution of manufacturing firms by gender and size - N (%)42
Table 5.2: Employment by gender and size for manufacturing firms4
Table 5.3: Level of innovation by firms in manufacturing4
Table 5.4: Distribution of MSMEs by gender and size -N (%)
Table 5.5: Employment by gender and size - N (%)
Table 5.6: Level of innovation by MSMEs5
Table 7.1: Distribution of population by urban centres by gender6
Table 9.1: Health provision72
Table 9.2: Percentage distribution of the population that reported sickness/injury by type of health provider in the county (%)
Table 9.3: Percentage distribution of the county's population with health insurance cover by type of health insurance provider (%)
Table 9.4: Proportion of children aged 0-59 months by place of delivery (%)72
Table 9.5: Proportion of children aged 0-59 months immunized against measles75
Table 9.6: Health indicators in Taita Taveta County76
Table 10.1: Gross attendance ratio and net attendance ratio by educational level in Taita Taveta County
Table 10.2: Gross and net enrolment rate (per cent), 2019
Table 10.3: Percentage distribution of population aged 15 years and above by ability to read and write (%)
Table 10.4: Percentage distribution of population by highest educational qualification8
Table 10.5: Percentage distribution of residents 3 years and above who had ever attended school by highest level reached, and sex for Taita Taveta County (%)
Table 11.1: The proportion of households by the first severe shock in the county90
Table 11.2: The proportion of households that received cash transfers by source, and household headship9
Table 12.1: Distribution of population age 5 years and above by activity status, and sex in the county99

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 SurveyKNBS - Kenya National Bureau of Statistics

KNOCS - Kenya National Occupational Classification Standard

LREB - Lake Region Economic Bloc LVSR - Low Volume Sealed Roads

M.I.C.E - Meetings Incentives Conferences and Exhibitions

MSMEs - Micro Small and Medium Enterprises

MT - Metric Tonnes

MTPs - Medium Term Plans

NGOs - Non-Governmental Organizations

OSR - Own Source Revenue

PFM - Public Finance Management
PPEs - Personal Protective Equipment

RAI - Rural Access Index

SDGs - Sustainable Development Goals

TVET - Technical and Vocational Educational and Training

UNICEF - United Nations International Children's Emergency Fund

UN - United Nations

WASH - Water Sanitation and Hygiene

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Executive Summary

Fiscal Policy

The county total revenue has significantly grown over the years as the Government focus on enhanced services to improve the livelihood of its residents. Total revenue has grown by 15.57 per cent from Ksh 2.79 billion in 2013/14 to Ksh 5.83 billion in 2020/21. Monthly cash transfers from the National government has been exhibiting increasing trend from January to June over the years. Conditional grants are a major source of revenue for financing county operations and has been growing over the years. The share of OSR to total revenue has been stable over time. On average, OSR contributed 5.06 per cent of the total revenue between 2013/14 and 2020/21. During 2019/20 the quarterly OSR collections were robust with marginal decreases compared to 2018/19. The county registered a growth of 89 per cent in OSR collections from Ksh 47.48 million realized during the first guarter to Ksh 89.86 million collected in the third guarter. County expenditure has over the years been rising as the county escalates its efforts in provision of services to its residents. Over the 2013/14 to 2020/21 period, actual expenditure has fell below the 30 per cent of county expenditure and averaged 20.4. In 2014/15 the county reported Ksh 295.5 million in pending bills. This increased to Ksh 709.3 million in 2015/16 with development spending related pending bills accounting for 79.3 per cent of this. To steer the county towards achieving its budgetary objective and development goals contained in the ADPs and CIDP, the county to ensure that the ongoing projects are completed before launching new project sand clear any pending bills and arrears owed to suppliers; 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 and improve budget execution and absorption of development budget by harmonizing project implementation cycles to budgeting and fast-track exchequer releases.

Agriculture, Livestock and Fisheries

Crop and Livestock production account for a for a significant share of economic activity in Taita Taveta County. Key agricultural value chain commodities in the County include:

- maize, beans, bananas, cassava, green grams, kales, avocado, mangoes, macadamia, citrus, cattle, goats, sheep, poultry production and bee keeping (apiculture). Among the socioeconomic effects on the COVID-19 pandemic on the agri-food sector in the County included negative effects on hours worked by in agriculture related occupations. An additional effect was a slow down on trade and marketing activities due to the restrictions on movements leading to price shocks and shortages of food items. Agricultural productivity in the County is also affected by: variable and extreme weather events; low agro-processing and value addition opportunities; dependence of rain fed agriculture; low access to quality and affordable inputs; low marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services;

pests and livestock diseases; farm losses and post-harvest waste; and poor and inadequate infrastructure. To successfully build resilience and enhance growth of the agriculture sector, the County to: explore partnerships to develop agro-processing and value addition capacities at the County; expansion of water harvesting projects and sustainable irrigation; scale up conservation agriculture, post-harvest management, plant and keep drought-tolerant crops and livestock breeds; link farmers to diverse product markets; strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural inputs and services and build their technical capacity to act on information obtained; provision of storage and cooling facilities; natural resource management; and strengthen agricultural cooperatives to enhance marketing.

Water Sanitation and Hygiene (WASH)

Clean water, proper sanitation and good hygiene remains an essential component in protecting human health in times of outbreak of infectious diseases. Frequent and correct hand hygiene has been emphasized by World Health Organization (WHO) as one of the frontline measures to curb transmission of COVID-19. This has placed a higher demand for water use in households, schools, health care facilities, marketplaces, workplaces, and public places. This therefore has necessitated the need for provision of water, sanitation, and hygiene by national and county governments to all. The county faced challenges in revenue collections due to COVID 19 which resulted into reduced incomes among households and businesses thus deferring collection of revenue from the water services it provides as well as financial support to water services providers. This in the long run could affect the development of the water and sanitation sector. Additionally, COVID-19 poses health challenges to water and sanitation officers if they get infected, they 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 to: Establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, the County to inject some stimulus to cushion the businesses and traders through affordable credit; waiver of some County taxes, cess, and other charges;

COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitisers, hospital beds and ventilators.

Infrastructure, housing and urban development

The main means of transport used in the County is walking followed by bicycle (boda boda). The paved county road network covers 63.27 km, while the paved National roads cover 272.32 km. Out of the total paved road network of 335.59 km. 52.4 per cent is in good condition, 26.7 per cent in fair condition and 17.5 per cent in poor condition. The status of ICT access and use in the county is low, especially among households. The perception of that the individual does not need to use the internet, access to internet elsewhere than home and lack of knowledge and skills on internet are the leading reasons that the people of in the County do not have internet connection. The housing tenure is predominantly owner occupied at 66.4 per cent, with 33.6 per cent of the households under rental tenure. Majority of the households (86.8 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 4.1 per cent reporting a partial waiver, despite inability to pay due to the pandemic. In addressing the prevailing challenges, the county to encourage urban-rural connectivity by investing in sustainable transport and mobility infrastructure: Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund as a "last resort" in providing ICT access in remote areas where market forces fail to expand access; and fast-track implementation of the affordable housing programme in partnership with the private sector targeting urban centres.

Tourism

Taita Tayeta County has immense potential to reap economic gains from tourism activities. There exists a wide range of tourist attractions with the County priding itself in being home to Tsavo East and Tsavo West National Parks. The county is well endowed with touristclass accommodation facilities. It has three star-rated hotels (2 three-star and 1 onestar) with a capacity of 102 rooms and 208 beds, and 27 other facilities (lodges, tented camps, campsites, and guest houses) with a capacity of 1,321 beds. Accommodation and food services contribute 4.4 per cent of total GCP. During the 2013-2017 planning period, the county government spent only 0.6 per cent of the total budget to development of the county tourism sector. Given the potential of tourism for socio-economic development of the county, there is need to allocate more resources to development of the sector, especially on diversification of the tourism products. Other constraints to growth and development of tourism in the county include Low fiscal efforts to raise local revenue from tourism which has been falling over time; increase in human-wildlife conflict occasioned by wildlife invading farming areas and predation of livestock. There is also low awareness by local communities on the benefits that can accrue from the Tsavo ecosystem. Among other recommendations, the county government of Taita Taveta will improve sanitation in the county to deal with the COVID -19 and other potential pandemics, which are already a setback to development of tourism, rehabilitate roads leading into the national parks to increase accessibility and establish tourism information centres.

Health

In 2019/2020, the number of health facilities in the county were 118 which comprised of 112 primary health facilities and 6 hospitals. This was an improvement from a total of 81 health facilities in the previous year, 2018. The number of beds per 10,000 population is 7 against the WHO recommendation of 30 beds per 10, 000 population. In general, 23.4 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 87 per cent of the population. Private contributions to insurance cover were reported by 0.9 per cent of the population while Employer-Contributory was reported by 4.8 per cent of the population. The county had 48.9 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 13.2 per cent were fully immunized against measles at 18 months. Health operations in Taita Taveta County were adversely affected by the COVID-19 pandemic. Out of fear, the number of people seeking health services went down significantly affecting the health revenue stream. In support to the county, the national government and the county treasury has donated PPEs to the health department. In line with the health status in the county, the county government will enhance investment in health systems, including in the health workforce, capacity building of community health workers and the medical officers on COVID-19, upgrading of working conditions and provision of requisite health commodities and equipment, especially in relation to personal protective equipment and occupational safety and create awareness on availability and importance of free maternity services and address other constraints to access of maternal health services in the county to address fear of contracting COVID-19 in event of visiting a health facility.

Education and training

The county's total enrolment in pre-school is 10,230, of whom 48 per cent are boys and 52 per cent girls. The total enrolment in secondary schools is 10,857, which comprises 5,495 boys and 5,362 girls. The enrolment of boys and girls in secondary schools is almost proportionate. The Gross Attendance Rate (GAR) for pre-primary school was 114.8 per cent while that of primary school and secondary school was 109.4 and 74.3 per cent respectively in 2015/16. The pre-primary gross enrolment rate in the county was 114.8 per cent in 2018 and while the net enrolment rate was 78.4 per cent. Approximately 44.1 per cent of the population do not have any educational qualification. This is below the national percentage of 49.7. Only 1.1 per cent of the population has attained university degree. The proportion of the population with CPE/KCPE qualification is 30.9 per cent and that of KCE/ KCSE qualification is 11.7 per cent. According to the National Adolescents and Youth Survey (NAYS, 2014), drugs and substance abuse, child labour, absenteeism of teachers and students were the main education problems affecting young people. The participants attributed the problems to peer pressure among youth as well as poverty which leads to school dropout as students cannot afford school fees. Going forward, the county government will make efforts towards addressing drug and substance abuse among the youths in the county. This can be done through counselling and ensuring that they are not idle especially this period when learning institutions are locked.

Social protection

The overall poverty rates in the county stand at 22 per cent which is lower than the national average of 36.1 per cent. The county's food poverty levels are at 27 per cent and 24 per cent of the total population is multidimensionally poor. The county government of Taita Taveta has prioritized social protection programmes within the county. The county has a total of 845 households under the CT-OVC Program programme. Wundanyi, Mwatate and Voi have a recorded 925, 924 and 1,061 respectively, totalling to some 3, 755. Severe shocks have had negative impact to the household's economic and social welfare of county residents. Households in the county received various forms of social assistance or transfers or gift either in form of a good, service, financial asset or other asset by an individual, household or institution. Transfers constitute income that the household receives without working for it and augments household income by improving its welfare, COVID-19 pandemic created effects with immediate and long-term economic consequences for children, PWDs, elderly and their families. In an effort to strengthen social protection response in face of a similar pandemic, the county government can: create awareness to workers on the available social protection services such as the NHIF specially in the informal sectors and 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, also design and implement a disability grant to all those who are severely disabled, and who are above the age of eligibility for the infant grant and below the age of eligibility for the old age pension.

Labour participation

The main economic activities in the county are agriculture, where the most current venture of horticultural production is in the Taita Hills, Other economic activities are the tourism industry that has boosted the services sector and the transport sector. Strategies to flatten the COVID-19 curve such as, social distancing, stay-at-home orders, travel and mobility restrictions have resulted in temporary closure of many hospitality businesses in the county and significantly decreased the demand for hotels that were allowed to continue to operate under the COVID-19 rules. All these had a negative impact on the livelihood of workers who used to work in hospitality industry. With the loss of jobs in the Small and Medium Enterprises the livelihood of people working in these sectors were directly or indirectly affected, particularly youths as the sector employs most of the young population. In addition, the reduction in operation hours and restriction on movement in and outside Nairobi and Mombasa County had negatively impacted on the transport sector with many relying on it rendered jobless. As a result, during the pandemic, about 4.5 per cent of workers in the county were casual workers 21.5 per cent were regular workers (full time), 7.6 per cent employees were working as part time. For continued recovery the county government will improve access to finance for small and medium enterprises through lending institutions for sustained business. In addition, build capacity in areas related to marketing, operations, finance and human resource development to enhance the chances of survival of SMEs and share the up-to-date and relevant information about COVID-19 symptoms and disease prevention recommendations among the county employees. County to use only credible sources of information, such as the Ministry of Health (MoH) and will establish a dedicated hotline or conduct a series of remote seminars with relevant health professionals to facilitate question and answer sessions with employees.



1. Introduction and Structure of Taita Taveta County Economy

1.1 Introduction

Taita Taveta County is one of the counties in Jumuiya ya Kaunti za Pwani (JKP) economic bloc. The county occupies a land area of 17,084.1 km². The county has an estimated population 340,671 people of whom 50.8 per cent were male and 49.1 per cent female (KNBS, 2019) as indicated in table 1. Of the population 8,305 (2.8 per cent) were persons with disabilities. The youth constituted 34.0 per cent of the population of whom 49.0 per cent were female. The County had a population density of 20 per km². About 72.5 per cent of the population live in rural areas of whom 48.7 per cent are female. The elderly population (age 65 year and above) made up 5.8 per cent of the total population of whom 55.2 per cent were female. The population in school going age group (4-22 years) was 40.3 per cent in 2019.

In 2015/2016, the overall poverty rate in Taita Taveta County was 32.0 per cent against the national poverty rate of 36.1 per cent. In addition, 39.0 per cent of the population were living in food poverty and 41.7 per cent were living in multidimensional poverty, that means being deprived in several dimensions including health care, nutrition and adequate food, drinking water, sanitation and hygiene, education, knowledge of health and nutrition, housing and standard of living, and access to information. According to KDHS 2014, 34.0 per cent of the children were stunted as compared to the average national level at 26.0 per cent.

Table 1.1: Development indicators in Taita Taveta County

	County	National
Estimated County Population (KNBS, 2019)		0.7% of the total
	340,671	population
Males	173,337	50.8%
Females	167,327	49.1 %
Intersex	7	0.002%
Estimated Population Density (km²)	20	82
Persons with disability	2.8%	2.2%
Population living in rural areas (%)	72.5%	68.8%
Children (0-14 years) (%)	37.2%	41.1%
School going age (4-22 years) (%)	40.3%	68.7%
Youth 15-34 years (%)	34.0%	36.1%

Labour force (15-64 years) (%)	57.6%	55.0%
Elderly population (over 65-year-old)	5.8%	3.9%
Number of COVID-19 cases (as at 11 th September 2020) (MOH); National cases were 35,232 people	1133	o.34%vof the national cases
Poverty (2015/2016) (%)	32.0%	36.1%
Food Poverty (2015/2016) (%)	39.0%	31.9%
Multidimensional Poverty (2015/2016)(%)	41.7%	56.1%
Stunted children (KDHS 2014)	34.0%	26%
Gross County Product (Ksh million) 2020	63,564	o.6% share to total GDP
Average growth of nominal GCP (2013-2020) (%)	15.4%	104.8 %

Data Source: KNBS (2019)

The age distribution of the county residents as per the 2019 Housing and Population Census is shown in table 1.2. The bulk of the County's population is in the age group of between 15-34 years comprising of 115,081 individuals. They are followed by persons aged between 6-13 years who are the primary school children comprising of 61,978 of the county population. The under 0-3 age comprise of 31,040 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 o-3	15,533	15,507	31,040
Preprimary school age (Under 4-5)	7,653	7,482	15,135
Primary School Age (6 -13)	31,123	30,855	61,978
Secondary school age (14-17)	15,257	14,516	29,773
Youth Population (15-34)	58,908	56,173	115,081
Female Reproductive age (15-49)		82,677	82,677
Labour force (15-64)	106212	98838	98,838
Aged Population 65+	8,833	10,896	19,729

Data Source: KNBS (2019)

1.2 Level of socioeconomic deprivations

In 2015/2016, 23.4 per cent of the population had health insurance cover, 10.8 per cent lived in premises with water, 62.2 per cent lived in their own homes and 87.5 per cent had access to mobile telephone (Table 1.3) and majority of the households (98.7%) had access to toilet facility. As a result, the multi-dimensional poverty is estimated at 81.7 per cent.

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

Indicator	Details	Percentage Distribution
Health care	Population with Health Insurance Cover	23.4
	Zero (In premises)	10.8
Drinking water (Time taken to fetch)	less than 30 minutes	76.2
	30 minutes or longer	12.9
	Proportion of households with toilet facility	98.9
	Shared Toilet	38.3
Sanitation and Hygiene	Not Shared	61.7
Samtation and Hygiene	Place to wash hands outside toilet facility	37.6
	No place to wash hands outside toilet facility	62.4
Education (Population 3 years and Above	Ever Attended	95.1
by School Attendance Status)	Never Attended	4.9
Knowledge of health and nutrition (children aged 0-59 months that	Participated in Community Nutrition Programmes	9
participated in Community Nutrition Programmes)	Did not Participated in Community Nutrition Programmes	90.3
Housing and standard of living (house	Owner Occupier	62.2
ownership)	Pays Rent/ Lease	26.9
	Television	49.8
Access to information (Population Aged	Radio	81.1
3 years and above by ICT Equipment and	Mobile phone	69.2
Services Used)	Computer	10.9
	Internet	17

Source: KIHBS 2015/16

1.3 Structure of Taita Taveta County Economy

Taita Taveta County Gross County Product (GCP) accounted for 0.6 per cent of total Gross Domestic Product (GDP) between 2013 and 2020 (Figure 1). The GCP increased from Ksh 30,583 million in 2013 to Ksh. 63,564 million in 2020 representing an average annual growth rate of 15.4 per cent.

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

| Sector Contribution as share of GCP | Sector Contribution | Sector Contribut

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

Data Source: KNBS (2019)

1.4 COVID-19 Caseload and Implications of Mobility Restrictions

As of March 2020, Taita Taveta County had zero cases. However, by August 2020, the County had reported 37 COVID-19 cases with mobility stringency of 70.4. The caseload would rise to 1,203 by August 2021 with mobility stringency of 56.0. The mobility stringency index is a composite measure rescaled to a value from 0 to 100 (100=strictest) based on nine response mobility indicators. The nine metrics used to calculate the mobility stringency index include school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closure of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movements and international travel controls. An index measure closer to 100 means high incidence or severity of mobility restrictions. The County mobility stringency index implies the severity of the restrictions was moderate.

Table 1.4: COVID-19 cases in Taita Taveta county and the country's mobility stringency

Date	Total cases	Mobility stringency (0-100)
13 th March 2020	0	36.1
23 rd August 2020	37	70.4
23 rd August 2021	1,203	56.0

Data Source: Oxford University

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

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



Data Source: Oxford University

Demand for retail and recreation, public transport, and workspaces were the worst hit by mobility restrictions in Taita Taveta County. Workspaces have benefited immensely from vacation of mobility restrictions from October 2021.

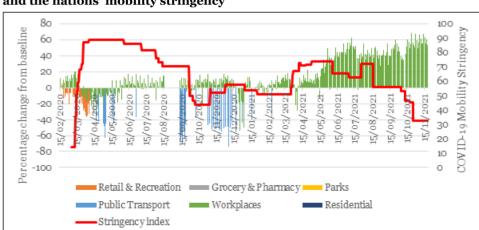


Figure 1.3: Effect of COVID-19 in Taita Taveta County economic performance and the nations' mobility stringency

Data Source: Oxford University

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

2. Socio-Economic Effects of COVID-19

2.1 Fiscal Policy

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

Transfers from National Government

The county total revenue has significantly grown over the years as the Government focus on enhanced services to improve the livelihood of its residents. Total revenue has grown by 109 per cent from Ksh 2.79 billion in 2013/14 to Ksh 5.83 billion in 2020/21. The amount realized in 2020/21 was 96.0 per cent of the annual budget allocation of Ksh 6.11 billion. The performance was an improvement from the 83.4 per cent target attained in 2019/20. This was supported by the 100 per cent remittances of equitable shares from the National government and growth in its OSR.

Analysis of the sources of revenue indicate that equitable share from the National Government has been the main source of county funding accounting for more than 77 per cent of the total revenues (figure 2.1). The share of equitable share from the National Government averaged 81.91 per cent of the total revenue between 2013/14 to 2020/21 underscoring its importance in financing County operations. During the same period, it increased by 75 per cent from Ksh 2.42 billion in 2013/14 to Ksh 4.24 billion in 2020/21. The amount received in 2020/21 accounted for 100 per cent of the annual budget allocation. This accentuates the commitment of the National Government to support county operations.

120.00 100.00 80.00 Percentage 60.00 40.00 20.00 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 Equitable share Own source revenue ■ Conditional grants Balance brought forward

Figure 2.1: Share of county revenues by source

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

Monthly cash transfers from the National government has been exhibiting increasing trend from January to June over the years as shown in Table 2.1. A similar trend was observed in 2020 with the cash transfers growing by 107 per cent from Ksh. 2.05 billion received in January to Ksh 4.23 billion in June. In comparison to 2019, the total amount transferred to Taita Taveta County between January and June increased by 7 per cent from Ksh 17.81 billion received in 2019 to Ksh 18.99 billion received in 2020. The increasing monthly transfers from the National Government in 2020 was a welcomed move to support the County in executing its budgetary operations as well as implementing measures necessary to curb the spread of the COVID-19 pandemic.

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

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
2021	2,509.77	2,933.40	-	-	-	-	1,210.54	-	-
2020	2,046.67	2,491.99	2,873.69	3,675.32	3,675.32	4,234.93	1,064.52	1,729.25	2,130.32
2019	2,091.22	2,490.15	2,496.68	2,898.73	3,567.08	4,267.71	3,567.08	1,122.07	1,559.07
2018	1,680.13	2,015.78	2,678.06	2,989.73	3,043.10	4,015.27	859.72	1,312.12	1,362.12
2017	-	-	2,696.16	2,999.70	3,292.79	3,578.47	896.03	-	-
2016	-	-	2,241.36	2,506.13	3,052.21	3,052.21	-	-	-

Data source: Gazette Notice (Various issues)

Conditional grants

Conditional grants are a major source of revenue for financing county operations and has been growing over the years. The County receives conditional grants from the National Government and development partners mainly from World Bank and Danish International Development Agency (DANIDA), European Union (EU) and Sweden. During 2020/21, the County received Ksh 194.05 million and Ksh 731.52 million from National Government and Development partners respectively. The contribution of condition grants to total revenue has been robust. On average, the grants contributed 8.31 per cent of the County total revenue between 2013/14 and 2020/21. In nominal terms, conditional grants have been on an upward trajectory, growing by over 200 per cent from Ksh 205.85 million in 2013/14 to Ksh 925.57 million in the 2020/21. The remarkable improvement indicates the potential the county holds in tapping for more finances from development partners. Going forward, it is important for the county to maintain the good relationship with its development partners and comply to their requirements so as to continue benefiting from the increased grants.

Own Source Revenue

The share of OSR to total revenue has been stable over time. On average, OSR contributed 5.06 per cent of the total revenue between 2013/14 and 2020/21. The county recorded the highest share of OSR to total revenue of 6.39 per cent in 2014/15 before declining over the years to a low of 3.85 per cent in 2017/18 (figure 2.1). During 2019/20, the County experienced significant improvements with the contribution of OSR to total revenue increasing to 6.27 per cent. Going forward, it would be important for the county

to strengthen its OSR collection framework as well as policies to maintain the upward trajectory and increase on its contribution to the total revenues.

Analysis of annual County OSR performance shows an upward trend from 2016/17 (Figure 2.2). The county registered improved performance in annual OSR collections from a low of Ksh. 172.02 million in 2016/17 to a high of Ksh 332.71 million in 2018/19. The performance of actual OSR versus target indicate that the county achieved more than 40 per cent of its target over the period under review, surpassing its targets by 10.9 per cent in 2018/19 (Figure 2.2). During 2019/20, the county generated Ksh 296.04 million from OSR which was 8.3 per cent decrease compared to Ksh 332.71 million realised during 2018/19. The significant decrease was attributed to COVID-19 pandemic which affected collection of revenue especially income from liquor licence. Following improved economic activities, the County generated Ksh 302.01 million in 2020/21, representing an increase of 4.1 per cent compared to 2019/20.



Figure 2.2: Annual Own Source Revenue targets and actual collections

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

The county collects most of its OSR during the third and fourth quarters (Figure 2.3). This may be attributed to the timeline of single business payments which elapses on 31st March of every year. During 2019/20 the quarterly OSR collections were robust with marginal decreases compared to 2018/19 (Figure 2.3). The county registered a growth of 89 per cent in OSR collections from Ksh 47.48 million realized during the first quarter to Ksh 89.86 million collected in the third quarter. During the fourth quarter the OSR collected amounted to Ksh 89.51 million, representing a marginal decline compared to third quarter collections. The decline was attributed to the extension of Single Business Permit to 31st May 2020 and waiver granted to all penalties and charges associated with late payments. During 2020/21, the quarterly OSR maintained an increasing trend with the third and fourth quarter generating the most amount of OSR. With the recovery of economic activities, it is expected that the County to maintain the growth trajectory to improve its contribution to the total revenue. In overall, the County OSR performance indicate that the County remained resilient during the COVID-19 pandemic period as the Country experienced low economic activities.

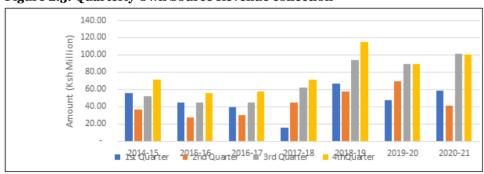


Figure 2.3: Ouarterly Own Source Revenue collection

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

County expenditure analysis

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

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

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

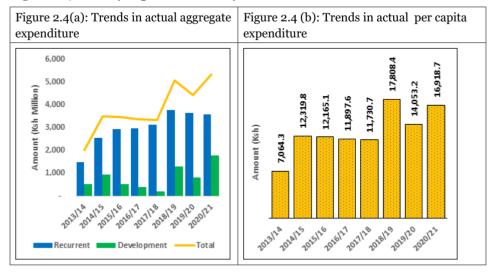
Trends and profile of county government expenditures

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 2,010.9 million to Ksh 5,345.4 million in 2020/21 (Figure 2.4). This translates to over 100 per cent increase in county spending over the period. Cumulatively the county has spent a total of Ksh 30.6 billion between 2013/14 and 2020/21. This comprises of a cumulative Ksh 24.1 billion and Ksh 6.5 billion

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

on recurrent and development expenditures representing 78.8 per cent and 21.2 per cent of the cumulative recurrent and development expenditure respectively. This signals that more development expenditure is required to support deepening of capital spending in the county.

Figure 2.4: County expenditure analysis



Source: KIPPRA based on Office of the Controller of Budget

Consistent with the nominal growth in actual county expenditures, spending on a per capita basis has more than doubled over the period. In 2013/14, per capita spending in the county was about Ksh 7,064.3 compared Ksh 17,808.4 in 2018/19 and Ksh 16,918.7 at the end of 2020/21. Between 2013/14 and 2020/21 per capita spending averaged Ksh 12,994.7.

Utilization of public resources in the county

Analysis of expenditures by economic classification and by departments (spending priorities) reveals that since inception of devolution, the county government prioritized narrowing the economic and social infrastructure gaps.

Over the 2013/14 to 2020/21 period, actual expenditure has fallen below the 30 per cent of county expenditure and averaged 20.4. In 2013/14 development expenditure accounted for 25.8 per cent. This increased to 27.1 per cent in 2014/15 staying below the 30 per cent and on a declining trend reaching 14.8 per cent in 2015/16, 12.0 per cent in 2016/17 and then plummeting further to 6.2 per cent in 2017/18. In 2018/19 development expenditure accounted for 25.7 per cent of total actual expenditure as presented in Figure 2.5. At the end of 2019/20 development expenditures accounted for only 18.1 per cent of expenditure and increased to 33.2 per cent at the end of 2020/21 due to COVID-19 pandemic related expenditure demands.

While development expenditure performed poorly and on a declining trend, compensation of employees has been on an upward trajectory between 2013/14 and 2018/19. The average share of compensation of employees in total county expenditure in that period was 51.2 per cent. In 2013/14, compensation of employees accounted for 47.9 per cent of total expenditure. This gradually increased topping at 64.4 per cent in 2017/18 before declining to 44.3 per cent in 2018/19. At the end of 2020/21, county wage bill accounted for 45.5 per cent of county expenditure.

100% 6.2 12.0 14.8 90% 18.1 25.8 25.7 27.1 33.2 80% 29.4 29.1 70% 34.4 34.9 60% 26.3 30.0 31.9 21.2 50% 40% 64.4 30% 58.9 47.9 50.8 47.0 44.3 45.5 41.0 20% 10% 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 ■ Compensation of Emloyees ■ 0&M ■ Development Expenditure

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

Source: KIPPRA based on 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 34.3 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, education, water, infrastructure, youth and gender affairs, agriculture, lands, and trade.

Spending on health services accounted for 11.0 per cent of the budget in the last seven fiscal years. Education and libraries accounted for 6.7 per cent; water and irrigation 4.3 per cent; infrastructure and public works accounted for 4.1 per cent; Agriculture, Livestock and Fisheries 3.8 per cent; Youth, Gender, sports, Culture and Social Services 1.9 per cent; Lands, Environment, Mining & Natural Resources accounted for 1.2 per cent; while Trade, Tourism & Co-operative Development accounted for 1.1 per cent.

Further during the review period, coordinational and administrative functions accounted for a combined average of 65.7 per cent with county administration and devolution leading at 37.7 per cent, county assembly 13.0 per cent, finance and economic planning 10.9 per cent, office of the governor and deputy governor accounted for 3.5 while county public service board accounted for 0.6 per cent.





Data Source: Office of the Controller of Budget

Effectiveness of County spending

Total budget execution averaged 77.5 per cent in the period 2013/14 to 2020/21. In 2013/14 overall total budget execution stood at 68.9 per cent. This execution improved to 84.6 per cent in 2014/15 and slowed to 83.3 per cent in 2015/16. The slowed execution continued to 72.7 per cent in 2016/17 and further down to 60.4 per cent in 2017/18. At the end of 2018/19 execution improved to 84.6 per cent and further to 87.4 per cent at the end of 2020/21. This means that in 2020/21 only Ksh 5,345.4 million was utilized out of the Ksh 6,114.7 million approved budget (Figure 2.6a).

With regards to development budget execution in the county, the average absorption rate between 2013/14 and 2020/21 was 48.9 per cent (implying that on average over half of the development budget is not absorbed). This is a major budget implementation weakness, and the county to continue tightening budget implementation to ensure achievement of greater absorption rates to keep 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 90.8 per cent leaving about 9.2 per cent of unspent recurrent budget. With COVID-19 era, the county has increased its efforts in provision of support to businesses and families and as the county continue to chart its level of preparedness to combat increased COVID-19 contagion.

Figure 2.6: County approved expenditure and absorption rates

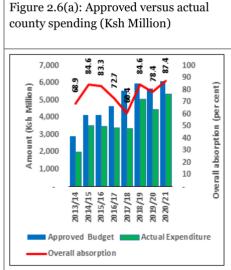
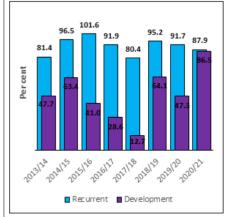


Figure 2.6 (b): Absorption rates for recurrent and development expenditures (per cent)



Source: KIPPRA based on Office of the Controller of Budget

Pending Bills

In 2014/15 the county reported Ksh 295.5 million in pending bills. This increased to Ksh 709.3 million in 2015/16 with development spending related pending bills accounting for 79.3 per cent of this. Pending bills declined to Ksh 281.4 million in 2016/17 and further down to Ksh 239.7 million in 2017/18 and then plummeting to Ksh 199.4 million in 2018/19. At the end of 2019/20 pending bills increased to Ksh 744.1 million before slightly slowing to Ksh 705.5 million at the end of 2020/21. Generally, pending bills related to development have been greater than those related to recurrent expenditure on average accounting for 62.6 per cent of the pending bills portfolio over the review period

The average development and recurrent expenditure related pending bills was Ksh 283.7 million and Ksh 169.8 million respectively during the 2014/15 to 2020/21 period. If pending bills for development were paid in their respective fiscal year, the execution of development budget in subsequent years would improve.

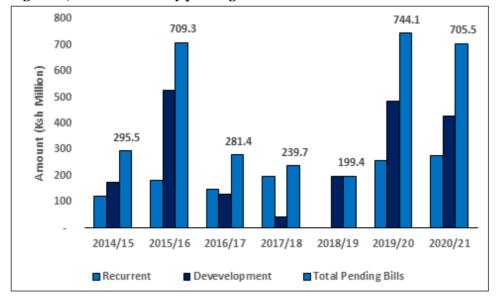


Figure 2.7: Profile of county pending bills

Source: KIPPRA based on Office of the Controller of Budget

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

Kev Messages

From the foregoing, the following are observed:

- i) Actual development expenditure has performed below the 30 per cent. This pattern reveals systemic weaknesses in county public investment management system
- ii) County wage bill has been growing tremendously at the expense of development expenditure. Between fiscal years 2013/14 and 2018/19 county wage bill was on an upward trend and on average accounted for 51.2 per cent of expenditure, while development expenditure has been plummeting attaining an average of 18.6 per cent over the same period.
- iii) Priority expenditure has been on administrative and coordinational functions accounting for an average of 65.7 per cent of actual expenditure. County administration and devolution leads at 37.7 per cent. Non-administrative and non-

- coordinational functions such as health, education, water, etc, account for 34.3 per cent of expenditure.
- iv) Budget execution as measured by absorption rate has been deteriorating over the review period. Average overall absorption rate stands at 77.5 per cent. Average development budget absorption rate stands at 48.9 per cent while that of recurrent expenditure stands at 90.8 per cent.
- v) Pending bills have remained high over the review period with development related pending bills accounting for 62.6 per cent of pending bills portfolio.

2.2 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) Ensure that the ongoing projects are completed before launching new project sand clear any pending bills and arrears owed to suppliers, 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.
- ii) Improve budget execution and absorption of development budget by harmonizing project implementation cycles to budgeting and fast-track exchequer releases.
- iii) Reduction of expenditure on compensation of employees which take over 50 per cent of total expenditure, this potentially affects execution of key development programs especially if not brought to sustainable levels.

3. Agriculture, Livestock and Fisheries

3.1 Characteristics of the Sector

Agriculture accounts for a significant share of economic activity in Taita Taveta County. More than 30 per cent of the County's economic activity is driven by the agriculture sector. In 2017, agriculture accounted for Ksh 19,858 million out of the total Ksh 51,381 million Gross County Product (GCP) amounting to 38.6 per cent of the County's GCP.

Over 55 per cent of the households in Taita Taveta County practice farming. About 50 per cent of the households produce crops, 45 per cent produce livestock, 0.29 per cent practice aquaculture and about 0.69 per cent are involved in fishing. About 10.6 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
Taita/Taveta	96,429	56,920	48,382	43,462	275	670	10,225
Mwatate	23,698	16,123	14,021	12,325	50	75	1,020
Taita	15,094	12,139	11,254	9,162	89	112	1,287
Taveta	24,115	14,591	12,053	10,851	92	428	7,239
Voi	33,522	14,067	11,054	11,124	44	55	679

Source: 2019 Kenua Population and Housing Census

On the scale of production, the FAO criterion on land size is used to identify small holder farmers as those producers that "fall in the bottom 40 per cent of the cumulative distribution" (Khalil et al., 2017). Using this criterion, about 34.4 per cent of the farming households in Taita Taveta County are "small-scale" farming with a land holding of 0.675 or less acres of land.

80 65.6
60 34.4
20 Medium and Large_Scale Small_Scale

Medium and Large_Scale Small_Scale

Figure 3.1: Scale of operation: Per cent of households

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

An overall analysis of the County agricultural production indicates among the top food crops produced by households in Taita Taveta include maize, beans, bananas, cassava, green grams and kales.

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

County/Sub County	Kenya	Taita/Taveta	Mwatate	Taita	Taveta	Voi
Maize	5,104,967	44,378	13,494	10,748	9,733	10,403
Beans	3,600,840	31,229	11,112	9,332	7,659	3,126
Bananas	2,139,421	17,629	4,363	6,047	5,472	1,747
Cassava	1,050,352	17,159	5,335	5,686	2,476	3,662
Green grams	571,426	14,573	3,501	1,226	3,170	6,676
Kales	1,916,898	11,557	2,903	4,358	2,661	1,635
Sweet Potatoes	1,134,102	9,080	2,624	3,883	1,270	1,303
Sugarcane	654,468	7,687	1,458	3,809	1,635	785
Tomatoes	410,224	6,428	1,191	1,201	3,058	978
Potatoes	1,170,170	4,906	938	3,333	290	345
Sorghum	904,945	3,651	608	612	1,187	1,244
Cabbages	490,588	2,838	657	1,325	488	368
Onions	707,182	2,340	444	758	526	612
Watermelons	84,077	2,155	320	351	437	1,047
Ground Nuts	480,812	2,033	327	186	262	1,258
Millet	540,353	1,935	330	395	370	840
Rice	50,484	488	60	54	339	35

Source: 2019 Kenya Population and Housing Census

Key permanent crops among households in Taita Taveta include avocado, mangoes, macadamia and citrus.

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

County/Sub County	Avocado	Citrus	Mango	Coconut	Macadamia	Cashew Nut
Taita/Taveta	7,963	3,284	7,171	2,504	3,650	543
Kenya	966,976	177,445	796,867	90,952	195,999	61,664

Source: 2019 Kenya Population and Housing Census

Resource productivity is another key important factor in determining the agro-processing potential (scale) of the County and would have a great impact on farmers' incomes and the County's GCP. An assessment of horticultural productivity indicates Taita Taveta's value of fruits production in 2019 amounted to Ksh 3.2 billion. The area under fruit was 7,250 Ha with a production of 204,681 MT. The major fruits grown in order of value importance are banana, watermelons, oranges, mango, macadamia nuts and loquats.

Table 3.4: Fruits grown in Taita Taveta County

Type of Fruit	Area in Ha	Production in Tons	Value in Shillings
Banana	5,405	180,326	2,716,844,700
Watermelons	143	3,145	115,687,000
Oranges	348	5,190	73,415,800
Mango	341	4,890	68,516,000
Macadamia Nuts	241	1,174	43,220,000
Loquats	110	3,300	39,600,000
Avocado	190	1,425	28,903,400
Garden Peas	17	255	23,800,000
Lemons	97	1,351	22,053,030
Custard Apple	37	813	17,546,600
Dudhi/Bottle Guard	76	654	15,660,000
Pawpaw	40	628	14,122,000
Passion Fruits	29	381	9,667,800
Pineapples	53	416	8,919,680
Pears	11	110	3,300,000
Ground Nuts	20	60	3,300,000
Tangerines	2	39	2,506,000
Runner/Broad Bean	8	82	2,460,000
Guavas	38	165	2,379,050
Lime	12	151	2,265,000
Pumpkin Fruit	1	20	1,650,000
Grapefruits	14	26	293,280
Leaf Amaranth	2	10	210,000
Grapes	6	10	126,000
Plums	6	60	-
Cashew Nuts	3	-	
Total	7,250	204,681	3,216,445,340

Source: Agriculture and Food Authority (2019)

In 2019, the value of vegetables production in the County amounted to Ksh 1.2 billion. The area under vegetables was 3,714Ha with a production of 45,801 MT. The major vegetables grown in order of value importance are French beans, potato, tomato, kales, cucumber, egg plant, cauliflower and cowpea.

Table 3.5: Vegetables grown in Taita Taveta County

Type of Vegetables	Area in Ha	Production in Tons	Value in Shillings
French Beans	1,225	7,604	168,355,000
Potato	350	7,360	160,170,000
Tomato	75	1,920	141,400,000
Kales	174	2,585	101,315,000
Cucumber	166	4,031	100,775,000
Egg Plant	171	3,827	94,860,000
Cauliflower	214	3,108	92,916,000
Cowpea	716	4,350	83,169,000
Snap Peas	202	4,360	63,400,000
Babycorn	81	2,025	60,750,000
Cabbage	66	2,004	38,160,000
Bell Pepper/Sweet Paper	29	287	33,255,000
Courgettes/Squash/Marrow	27	513	12,825,000
Snow Pea	34	464	12,605,000
Spinach	38	416	7,030,000
Carrots	69	283	4,955,000
Karella	27	216	4,680,000
Turnips	22	192	3,840,000
Lettuce	11	62	1,540,000
Okra	5	48	1,360,000
Turia	8	64	1,080,000
African Nightshade	2	48	1,020,000
Spider Plant	1	18	900,000
Pumpkin Leaves	1	16	800,000
Total	3,714	45,801	1,191,160,000

Source: Agriculture and Food Authority (2019)

In 2019, the value of MAPs production in the County amounted to Ksh 2.6 billion. The area under MAPs was 2,231Ha with a production of 44,255 MT. The major MAPs grown are Palak, Corriander, Lemon grass, Chives and Artemisia.

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

Medicinal and Aromatic Plants (MAPs)	Area in Ha	Production in Tons	Value in Shillings
Palak	2,060	41,200	2,472,000,000
Corriander	22	599	40,775,000
Lemon Grass	85	1,700	37,760,000
Chives	8	224	10,080,000
Artemisia	31	310	6,200,000
Methi	12	120	5,300,000
Rosemary	5	55	2,475,000
Bulb Onion	2	22	2,000,000
Aloe	0	5	254,400
Bullet Chilies	5	11	225,000
Long Cayenne Chilies	1	9	180,000
Total	2,231	44,255	2,577,249,400

Source: Agriculture and Food Authority, 2019

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

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

County/Sub County	Kenya	Taita/ Taveta	Mwatate	Taita	Taveta	Voi
Indigenous Chicken	3,337,700	34,560	9,776	7,372	8,803	8,609
Goats	1,898,887	24,512	7,021	2,989	7,211	7,291
Indigenous Cattle	2,260,439	16,591	4,422	2,684	5,155	4,330
Exotic Cattle -Dairy	939,916	7,893	2,634	3,762	527	970
Sheep	1,299,893	7,190	1,436	2,216	2,367	1,171
Beehives	201,406	1,857	498	440	414	505
Rabbits	124,122	1,555	362	464	466	263
Donkeys	500,682	1,528	480	590	247	211
Exotic Cattle -Beef	167,625	1,088	331	473	134	150
Exotic Chicken Layers	194,517	895	209	261	135	290
Exotic Chicken Broilers	79,461	641	135	140	81	285
Fish Ponds	22,019	262	49	85	85	43
Pigs	110,383	148	62	29	28	29
Camels	167,666	63	7	2	16	38
Fish Cages	3,361	27	1	6	12	8

Source: 2019 Kenya Population and Housing Census

The above characterization of farming households highlights the priority value chain opportunities in maize, beans, bananas, cassava, green grams, kales, avocado, mangoes, macadamia, citrus, cattle, goats, sheep, poultry production and bee keeping (apiculture). With majority of the households farming the identified products, the current Taita Taveta transformation strategy in agriculture should prioritize value chains in the identified areas to positively impact of households' livelihoods.

Agri-Food Challenges in COVID-19

i) Human capital/employment levels – by gender

Agricultural labor participation in Taita Taveta indicates relative dominance by females and males in specific sub-categories of agriculture related occupations in the County. Majority of the population in Taita Taveta are agricultural, fishery and related labourers who recorded the highest difference of 12 hours between the usual and actual hours worked in a week. The workers in this sub-major group include Farmhands and Related Labourers; Forestry Labourers; and Fishery, Hunting and Trapping Labourers. The second most popular sub-category are farm workers where the group covers occupations related to: Field Crop, Vegetable and Horticultural Farm Workers; Poultry, Dairy and Livestock Producers; and Crop and Animal Producers. The classifications are based on the Kenya National Occupational Classification Standard (KNOCS).

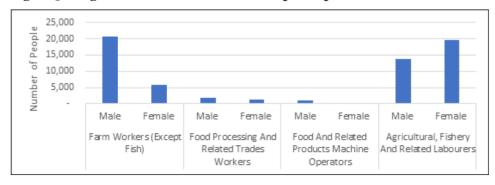


Figure 3.2: Agriculture-related labour force participation

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 most of 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 8 hours between the usual and actual hours worked in a week.

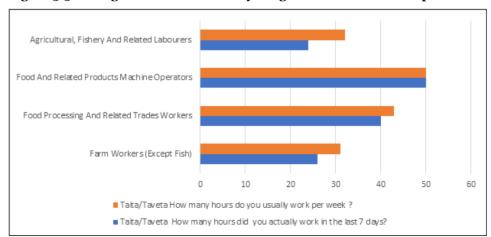


Figure 3.3: Changes in hours worked by in agriculture-related occupations

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

Among the marketing issues faced by the County is road access, a key indication of access to markets. Taita Taveta's rural access index (RAI)- which measures "the number of rural people who live within two kilometres (typically equivalent to a walk of 20-25 minutes) of an all-season road as a proportion of the total rural population- fairs poorly at 48 per cent. This is low compared to the national average of 69.38 per cent.

As a result of COVID-19, there has been a further slow down on trade activities due to the restrictions on movements. From the KNBS conducted between 30th May and 6th June 2020, 10.6 per cent of the households in Taita Taveta 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.

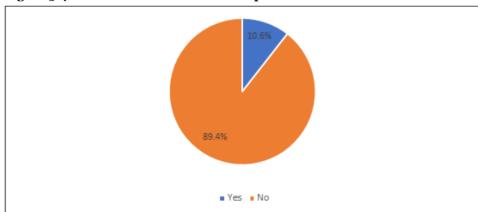


Figure 3.4: Limited access to markets to purchase food items

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 (66.3 per cent), transport limitations (20.2 per cent) and concerned about leaving the house due to outbreak (13.6%).

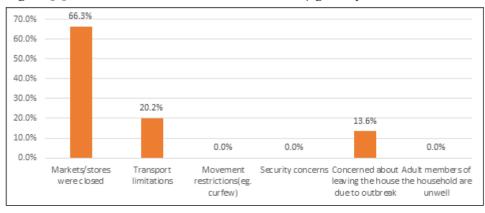


Figure 3.5: Reason for Limited access to markets/grocery stores

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. 76 per cent of households in Taita Taveta County indicated that over the past 2 weeks from the reference period, while 22 per cent indicated that they had not experienced a change in the prices.

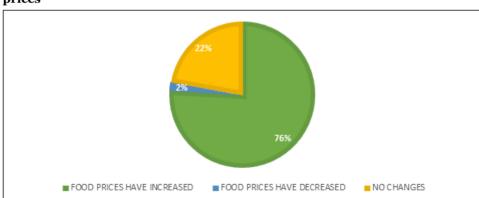


Figure 3.6: Percentage of households experiencing change in food commodity prices

On the magnitude of the price shocks, 53 per cent of the households indicated they faced a large rise in food prices in the past two weeks from the reference period.

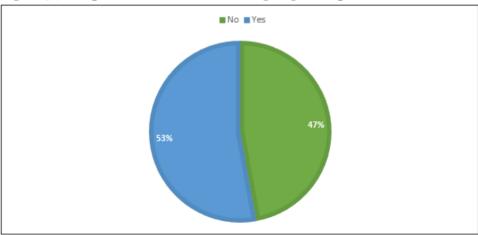


Figure 3.7: Proportion of households facing large food price shocks

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 figure below.

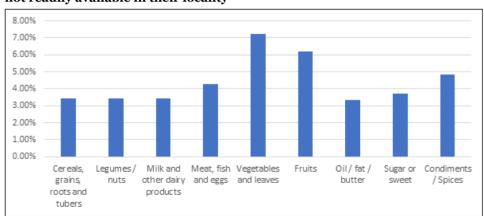


Figure 3.8: Per cent Households reporting that the following food items were not readily available in their locality

While access to all food groups were affected as shown in the figure above, a key concern is the effect on nutritious food categories- vegetables, fruits and meat-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 (67.1 per cent), reduce number of meals eaten in a day (64.8 per cent), decreased buying some non-food products (61.5%), limit portion size at mealtimes (55.9%) and purchase food on credit or incurred debt (53.6%).

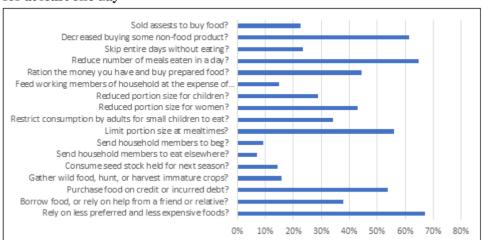
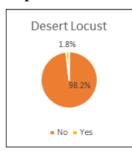


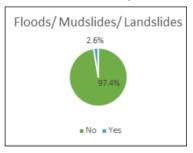
Figure 3.9: Per cent of households where the following strategies were adopted for at least one day

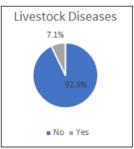
Source: KNBS Survey on Socio Economic Impact of COVID-19 on Households-Wave 2

Additional challenges faced by the County during the COVID-19 pandemic period include Desert locusts (1.8 per cent); Floods/ Mudslides/ Landslides (2.6 per cent); and Livestock Diseases (7.1%)

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







Agri-Food Constraints Faced in the County

Among the Key Constraints the County faces include:

- a) Variable and extreme weather events which have increased in frequency and intensity over the years adversely affecting crop and livestock production
- b) Water scarcity affecting crop and livestock productivity
- c) Dependence of rain fed agriculture despite frequency in extreme climate conditions, such as drought episodes and delayed and erratic rains
- d) Poor and inadequate infrastructure affecting marketing activities. For instance, the County had comparatively low road networks in comparison to other counties, critical for access to input and output markets
- e) Poor natural resource management leading to land degradation and consequently to reduction of water in rivers and wells, reduced soil fertility and deforestation.
- f) Inadequate extension and veterinary services
- g) Farmers low access to access to quality and affordable inputs including certified seeds, water, animal feeds, artificial insemination (AI) services, fertilizers, livestock vaccination and mechanized equipment
- h) Slow uptake of digital platforms to market agricultural produce.
- Lack of storage and agro-processing capacities leading to farm losses and postharvest waste.
- j) Farmers low access and capacity to act on early warning bulletins among other climate and weather advisories, as well as limited capacities in pastures rehabilitation and investment is sustainable land management practices.
- k) Farm losses and post-harvest waste.
- l) Limited marketing opportunities for improved incomes
- m) Low commercialization of farming where majority of farmers practice farming for subsistence purposes and as cultural practices rather than a business.

- n) Poor access to agricultural finance, to include credit and insurance.
- o) Inadequate extension and veterinary services
- p) Pests and Diseases
- q) 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 episodes.

3.2 Opportunities with COVID-19 in Agriculture Sector

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

- i. Businesses/ MSMEs: Businesses and MSMEs are crucial in providing inputs and requirements to the agricultural sector. The sector would facilitate the efficient access to
- 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. Developing County-private partnership in enhancing agro-processing and value addition and Linking farmers to product markets
- Access to quality, certified, and affordable inputs including certified seedlings, AI services, fertilizers, livestock vaccination, ploughing services by County tractor hire services.
- iii. Investment in cooling and storage facilities to reduce post-harvest losses
- iv. Adoption of drought resistant livestock pastures/fodder and crops
- v. Adoption of early maturing, drought resistant and improved crop varieties
- vi. Rearing livestock breeds adapted to drought
- vii. Strengthening water harvesting, sustainable and efficient irrigation.
- viii. Increased livestock production through: routine vaccination, deworming and vector control to maintain animal health; decentralized veterinary services; disease surveillance; storing and conserving pastures and fodder; capacity building on animal management and training on preservation and value addition techniques and provision of mechanized equipment for farming.

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

3.3 Emerging Issues

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

Recommendations

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

- Develop partnership with the National Government, NGOs, Development Partners, Research Institutions and the Private sector in enhancing agro-processing and value addition capacities of the County in Livestock Export Processing Zones, horticultural, dairy and poultry development industries.
- ii) Provision of storage and cooling facilities particularly at collection points to minimize spoilage and post-harvest losses in every ward.
- iii) Invest in access roads to enhance linkage between farms and markets. Extensive rural road infrastructure plays a central role in provision of affordable access to both markets for agricultural outputs and modern inputs. Taita Taveta's rural access index (RAI) fairs poorly at 48 per cent compared to the national average of 69.4 per cent. Other crucial market infrastructure includes lighting and water services to facilitate trade activities.
- iv) Further, commercialization levels for some agricultural commodities are very low; as low as 15 per cent for some food crops, 11.8 per cent for some livestock and 47.8 per cent for livestock product). Agricultural commercialization levels in the County can be improved through farmers' cooperative societies and producer associations.
- v) To enhance production in the ASAL County, there is need for investments and efficient utilization sustainable irrigation and water harvesting technologies in the County through partnership with development partners. To support expansion of sustainable irrigation, the County to promote development of Irrigation Infrastructure and technologies in the County. Existing irrigation and water harvesting projects include

- Lumi water pan, Challa Tuhire Irrigation Project and Njukini Irrigation Project, most of which are under production.
- vi) Access to quality and affordable inputs including certified seeds, drought tolerant seeds, water, animal feeds, artificial insemination (AI) services, fertilizers, livestock vaccination and mechanized ploughing services by County tractor hire services.
- vii) Establish programmes for surveillance of disasters such as extreme weather conditions, crop pest and diseases, and livestock disease at the County level equipped with relevant technical specialists and finances to effectively prepare, respond and prevent risks. 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) Build the capacity of farmers in produce handling/ output/ improved product standards, adoption of modern farming technologies and practices (e.g. water harvesting techniques, fodder establishments, hay harvesting, post-harvest management) and adopt sustainable land management practices to minimize environmental degradation. this can be achieved through agricultural training centers.
- ix) Digitize the agri-food sector to support: training and building capacities of farming households in modern agricultural technologies, provision of advisory and information services, marketing agricultural produce at a wider scope beyond the County level and improving access to innovative support services including credit and insurance services.
- x) Strengthen agricultural cooperatives through effective stakeholder engagement and implementation of interventions for more sustainable models of financing and customized training of cooperative members.

4 Water, Sanitation, and Hand Hygiene

4.1 Characteristics of the Sector

The main rivers in the county are Lumi, Tsavo and Voi. Mzima Springs forms the main water supply for Voi town and Mombasa City. Smaller springs augment this supply, and include Njoro Kubwa, Sanite, Njukini, Maji Wandeni, Lemonya, Kitobo and Humas Springs. Additionally, Lake Challa and Jipe found in the Taveta area are served by springs emanating from Mt. Kilimanjaro.

This is the Mzima Water Project, which supplies water to Voi town and its environs through a number of major projects including Voi water supply, Mbololo water supply, Irima, Kimwa and Kaloleni water projects, Miasenyi water project, Manyani water supply, and Maungu-Bughuta water project. This scheme is also among the major suppliers of water in the coastal city of Mombasa. The source of the water is Mzima springs, situated in the Tsavo West National Park.

The majority of households in the County use pit latrines, which are 75.8 per cent of total number of toilet facilities. 67.4 per cent of these are covered pit latrines. The Ventilated Improved Pit (VIP) latrines form 4.5per cent of total toilet facilities. The other main type of facility is flush toilets, which accounts for 5.8 per cent. An estimated 63,981 (about 86 per cent) of the total households in the County have access to toilet facilities while about 14 per cent of households do not have any kind of toilet facility.

The county is a water scarce hence need to invest more in increasing access to water by households which include digging boreholes in remote areas. The county government has allocated 101 million shillings to COVID related issues. The 101 million shillings was split into two; 76 million which was aimed to cater for COVID related and 25 million shillings which is aimed to be used for food ration and water supply. The major challenges of the water company were to do with distribution and some of the budget in the 25 million will help in buying pipes and ease distribution of water to areas where water has not reached. The rig regulation was passed in the county assembly and the work has begun of drilling boreholes across the county. Within the 2020/21 budget, there are allocation for dams and for desilting water.

Access to source of water by households

The major sources of water for drinking utilized by households in the county are piped water, (public tap/standpipe) (40. per cent), piped water into the plot/yard (27.8 per cent) and piped water into the dwelling (9.3 per cent). Water from springs (0.8 per cent) and dug well (protected) (4.8 per cent) are also majorly used for other domestic purposes. Similarly, most rural households rely on piped water/public tap stand (37.3 per cent), dug well (unprotected) (23.7 per cent) and rainwater collection (15.7 per cent). While majority of urban (64.3 per cent) and peri urban (68 per cent) households relies on piped water into dwelling.

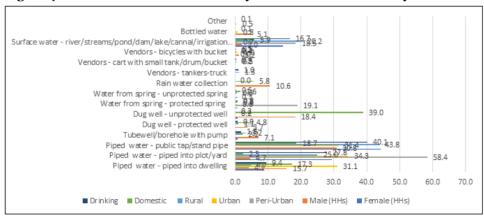


Figure 4.1: Access to sources of water by households in the county

Source: KNBS 2015/2016

Combating COVID-19 pandemic has already placed high demand for water for both domestic usage in households, health care institutions, learning institutions, marketplaces and other public places. Water also remains important to other sectors of the economy such as agriculture and industrial usage, among others. With the planned re-opening of schools and upcoming low rain seasons means that the pressure on water resources will be high, this therefore means that the demand for water will be high and if the supply will be low, households are likely to fail to observe COVID-19 prevention measures of hand washing which may in turn lead to high transmission of COVID-19.

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

Therefore, for equality in access to water the county government can waive or reduce the water bills for urban households who uses piped water as well as support water vendors in access to clean safe water at a reduced cost. This will mean financial support to water service companies. Other long-term measures include inclusion of both rural, urban, and peri-urban dwellers into decision making in regard to water management and governance.

Access to improved and unimproved sources of water by households

Clean and safe water is essential for good health and goes a long way in ensuring reduced infections. Access to improved drinking water drinking water² in the county is high among households (80.8 per cent), this is also similarly among rural (76.9 per cent) urban (97.5

² Improved sources of water include; water from the following sources Piped water - piped into dwelling, Piped water - piped into plot/yard, Piped water - public tap/stand pipe, Tubewell/borehole with pump, Dug well - protected well, Dug well - unprotected well, Water from spring - protected spring). Unimproved sources of water which include; Water from spring - unprotected spring, Rain water collection, Vendors - tankers-truck, Vendors - cart with small tank/drum/bucket, Vendors-bicycles with bucket, Surface water river/streams/pond/dam/lake/cannal/irrigation channel Bottled water. This is according to WHO and UN classification of sources of water

per cent) and peri urban (81.5 per cent) areas. Both male and female headed households have higher access to improved drinking water source of water as shown in the figure below.

Households 80.82 Rural Urhan 97.46 Peri-urban 81 54 15.33 Male (HHs) 84 67 15.31 Female(HHs) 84.69 n 100 120 Un improved water source Improved water source

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

Source: KNBS 2015/2016

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

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

Volumes for water used by households in a month

Most households (33.5 per cent), rural (35.6 per cent) urban (29.6 per cent) as well as male (43.9 per cent) and female (43.6 per cent) headed households use between 1000 and 1999 litres of per month. Compared to Peri-urban households (44.9 per cent) that uses above 5,000 litres in a month.

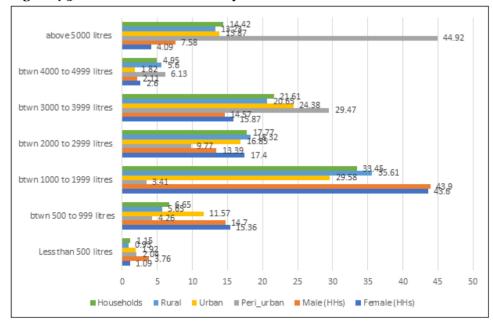


Figure 4.3: Volumes of water used by households in a month

Source: KNBS 2015/2016

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

Majority of the households (90.5 per cent) 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 (9.5 per cent) covers more than 500 metres to water sources (see the figure below)

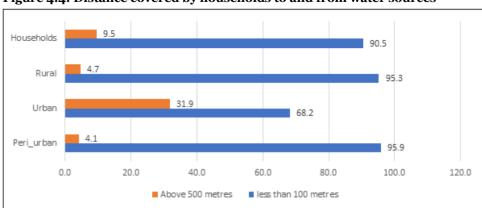


Figure 4.4: Distance covered by households to and from water sources

Source: KNBS 2015/2016

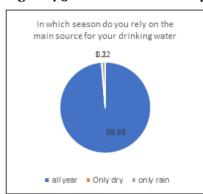
If water is available to households, schools, health institutions within the shortest distances possible, it easily encourages observing hand hygiene thus minimizing infections. In learning institutions, it minimizes rates of school dropouts among girls. Women headed households are disadvantaged in access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

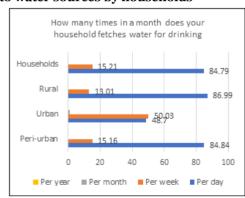
Access and reliability of water sources

Majority of households in the county have to rely on the main source of drink water all year round at 98.7 per cent, therefore in case of the source drying up, households will lack water resulting into non observance of COVID-19 measures of hand washing. On the other hand, most households (84.8 per cent) must go to fetch drinking water from the sources per day rural (13. Per cent) and peri-urban (15.2 per cent). On the other hand, majority of urban (48.7 per cent) households have to access to water sources daily.

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

Figure 4.5: Access and reliability to water sources by households





Source: KNBS 2015/2016

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

Access to sanitation

Majority of the households (66.9 per cent), rural (73.1 per cent) and peri-urban (85. Per cent) uses pit latrine without slab, while most of the urban households use pit latrine with slab (34.3 per cent) and flush to septic tank (34.9 per cent).

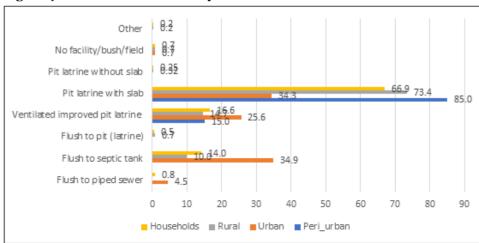


Figure 4.6: Access to sanitation by households

Source: KNBS 2015/2016

Access to improved and unimproved sanitation

Majority of the households as well as both male and female headed households have access to access to improved sanitation facilities³ . Access to improved sanitation is very important in maintaining hygiene and keeping infectious diseases away, good sanitation can help to detect the genetic residues of diseases in wastewater as those who are infected are thought to shed traces of the virus in faeces thus prompting for immediate action from the health officials.

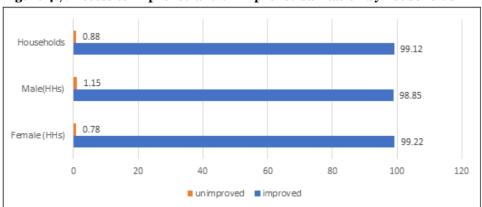


Figure 4.7: Access to improved and unimproved sanitation by households

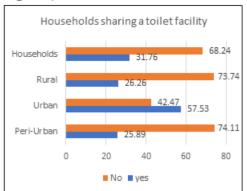
Source: KNBS 2015/2016

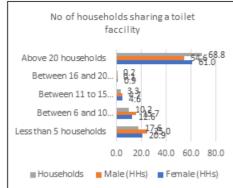
Improved sanitation includes; flush to piped sewer, flush to septic tank, flush to pit (latrine), flush to somewhere else, flush to unknown place, ventilated improved pit latrine, pit latrine with slab, pit latrine without slab). Unimproved sanitation includes; composting toilet, bucket toilet, hanging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

Sharina of a toilet facility

Additionally, most households (68.2 per cent), rural (73.7 per cent) do not share a toilet facility with other households. There are large proportions of households in urban and peri-urban households who share a toilet facility with other households at 57.5 per cent and 25.9 per cent respectively. On the other hand, most of households (68.8 per cent) for male (54.6 per cent) and female (61 per cent) headed households do share a toilet facility with more than 20 other households. Only a small proportion of households do share a toilet facility with less than 5 other households at 17.6 per cent.

Figure 4.8: Number of households sharing a toilet facility





Souurce: 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

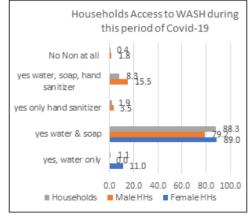
WASH has been identified very important in helping to curb transmission of infectious diseases, 39.2 per cent of the households in the county do not have a handwashing facility in their households. On the other hand, 88.3 per cent of the households have access to WASH (Water and soap) during this period of COVID-19 male headed households at 79.2 per cent and female headed households at 89 per cent. Additional small proportions of households (8.3 per cent) had access to both water, soap and hand sanitizer.

Is there a place for handwashing in your facility?

39.2

60.8

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



Source: KNBS KIHBS 2015/2016

Source: KNBS COVID-19 wave 2, 2020

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

4.2 Opportunities with COVID-19 in WASH

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

4.3 Emerging Issues

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

4.4 Recommendations

The recovery strategy recommends the following strategies for implementation:

i) Expand and rehabilitate the existing piped water connection infrastructure to help increase access to water. There is low access to piped water which stands at 27.11per cent in urban 10.54per cent in rural and 18.67per cent in peri urban areas. This means low revenue from piped water for the county government. Similarly, it also implies low access to clean and safe water which is guaranteed through piped water system. To increase piped water connectivity to households. The county government can collaborate with the private sector, non-Governmental organization, and the local community to expand the water infrastructure.

- ii) The county to increase water supply in households, institutions and public places through drilling of boreholes in all the sub-counties.
- iii) Expand sewer infrastructure to accommodate more households, currently there is low access to piped sewer among households which is 13.41per cent urban, 8.76per cent peri urban and 2.56per cent rural areas. Less than 0.5per cent of the population have no access to toilet facility. Low connectivity to piped sewer denies the county the much-needed revenue from sanitation services as well as access to safe sanitation.
- iv) Improve access to safe and improved toilets in schools, health care facilities, workplaces and public places. Additionally, sharing of a toilet facility with other households is common which stands at 34.93per cent rural, 76.61per cent urban and 51.11per cent peri urban. Toilet sharing puts households at risk of contracting COVID-19, and other infectious diseases in cases where proper toilet hygiene is not maintained. Increased access to sanitation can be achieved through collaboration between county government, national government, development partners and PPP to expand sewer infrastructure and to accommodate more households.
- v) Promote the importance of handwashing and construct WASH facilities to increase access at the household level. Currently access to WASH is high among households with majority having access to water and soap at 66.91per cent, water soap. On the other hand, 90.8per cent of the households do not have a designated handwashing facility in their households. This may compromise hand washing hygiene of households thus making households vulnerable to contracting COVID-19. 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.

5. Manufacturing, Trade and MSMEs

5.1 Characteristic of the Sector

ao Manufacturing sector

Taita Taveta County has 2,873 establishments involved in manufacturing activities which comprise of 11.5 per cent of a total of 24,922 firms (KNBS, 2016). In terms of size 2,723 (94.8 per cent) are micro, 87 (3 per cent) are small and 63 (2.2 per cent) are medium enterprises. The main drivers of the economy of the county include agriculture (39 per cent), services (57 per cent), and manufacturing (0.2 per cent) (GCP, 2019).

Sector of operation

The KNBS, 2016 survey establishes the key sub-sectors that drive manufacturing as: wearing apparel (42.6 per cent), food products (24.9 per cent), furniture (15 per cent) and fabricated metal products, except machinery and equipment (11.7 per cent) (figure 5.1). These are sub-sectors that are considered essential in dealing with COVID-19 and are likely to experience increased activity with focus on food production, production of Personal Protective Equipment (PPEs) and hospital beds. The key products useful in value addition and driving manufacturing include cereals (Maize, sorghum, Rice), horticultural crops (kales, tomatoes, cabbages, French beans, snow peas, capsicum, Asian vegetables), nuts and oil crops (macadamia, groundnuts, sunflower, coconut, cashew nut), and fibre crops (cotton, sisal). The county is also endowed with abundant minerals which include iron ore, limestone, marble, magnetite, asbestos, graphite, Kaolin clay, copper, manganese, nickel and mica. Other important industrial activities are quarrying, ballast and sand harvesting.

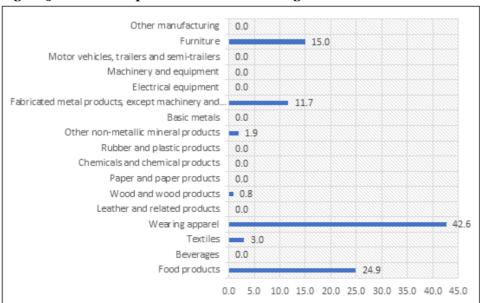


Figure 5.1: Sector of operation in manufacturing

Sector of operation by size

Majority of the establishments in Tata Taveta County are micro in nature and operate in the wearing apparel (40.5 per cent), food products (22.7 per cent), furniture (15 per cent), and fabricated metal products except machinery and equipment (10.8 per cent) (figure 5.2). Small sized establishments operate in food products (2.2 per cent), and fabricated metals products, except machinery and equipment (0.8 per cent).

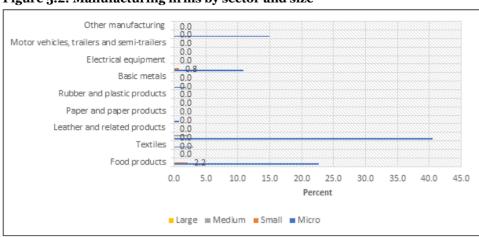


Figure 5.2: Manufacturing firms by sector and size

Source: KNBS, 2016

Location of manufacturing firms by type of premises

Common premises used by manufacturing firms in Taita Taveta County are commercial (22.5 per cent), building sites and road works (19.8 per cent), market stall (18.6 per cent), industrial site (9.6 per cent), Jua kali sheds (8.7 per cent), residential with special outfit (6.4 per cent), and kiosk (6.1 per cent) (figure 5.3).

Other manufacturing Motor vehicles, trailers and semi-trailers Electrical equipment Basic metals Rubber and plastic products Paper and paper products Leather and related products Textiles Food products 0.0 5.0 10.0 15.0 20.0 25.0 30 O 35.0 40 O 45 N Percent ■ Large ■ Medium ■ Small ■ Micro

Figure 5.3: Location of manufacturing firms by premises

Source: KNBS, 2016

Distribution of Manufacturing firms by gender and size

Manufacturing establishments in Taita Taveta County are dominantly owned by females (51.7 per cent), with males comprising 42.2 per cent while 6.1 per cent are jointly owned. In terms of micro-sized firms, 41.3 per cent are male owned, 52.3 per cent female owned and 6.4 per cent jointly owned. Small sized firms are largely female owned (72.2 per cent) while the rest are male owned (27.8 per cent) (table 5.1).

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

Gender	A11	Micro	Small	Medium
Male	2,873 (42.2)	1,126 (41.3)	24 (27.8)	63 (100)
Female	1,486 (51.7)	1,424 (52.3)	63 (72.2)	0 (0)
Joint	174 (6.1)	174 (6.4)	0 (0)	0 (0)
Total	2,873 (100)	2,723 (100)	87 (100)	63 (100)

Source: KNBS, 2016

Distribution of manufacturing firms by gender and sector

Majority of the sub-sectors in manufacturing are male dominated including furniture (13.3 per cent), fabricated metal products except machinery and equipment (9.2 per cent), wearing apparel (8.8 per cent), and food products (7.4 per cent). Females are mostly found in wearing apparel (33.9 per cent), food products (13.1 per cent), textiles (2.2 per cent), and fabricated metal products except machinery and equipment (0.8 per cent) (figure 5.4).

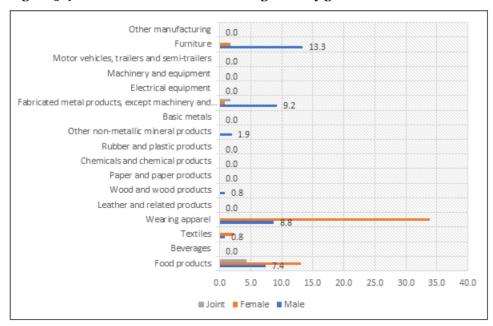


Figure 5.4: Distribution of Manufacturing firms by gender and sector

In terms of employment, the manufacturing sector in the County employs more men (55 per cent) than women (45 per cent). Most men are found in the medium-sized enterprises (28.4 per cent) while 24.7 per cent are in micro-sized establishments. Majority of the women are predominantly in small enterprises (25.3 per cent), and the micro enterprises (19.7 per cent) respectively (table 5.2).

Table 5.2: Employment by gender and size for manufacturing firms

Number of employees	Micro	Micro Small		Total
Male	3,008 (24.7)	242 (2)	3,458 (28.4)	6,707 (55)
Female	2,408 (19.7)	3,081 (25.3)	0 (0)	5,488 (45)
Total	5,415 (44.4)	3,322 (27.2)	3,458 (28.4)	12,195 (100)

Source: KNBS, 2016

Education levels of Manufacturing firm owners

Education levels of manufacturing owners in Taita Taveta County are depicted in figure 5.5 as follows: primary (49 per cent), secondary (37.1 per cent), vocational or youth polytechnic (8.1 per cent), and pre-primary (2.2 per cent).

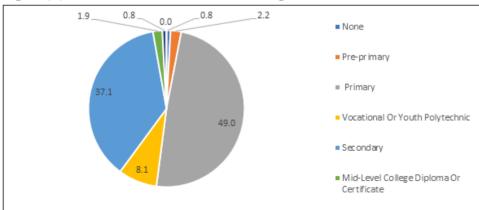


Figure 5.5: Education levels of manufacturing firm owners

Source of markets

Majority of manufacturing establishments and MSMEs in general rely on individual consumers for markets at 85.5 per cent and 86.6 per cent respectively (figure 5.6). Other sources of markets include MSMEs and non-MSMEs.

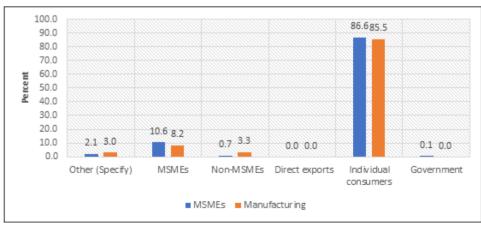


Figure 5.6: Source of markets

Source: KNBS, 2016

Source of material inputs

Overall, manufacturing establishments and MSMEs source for material inputs from amongst individual suppliers at 53.3 per cent and 47.2 per cent respectively (figure 5.7). MSMEs, farmers, as well as non-MSMEs are also important to the supply of inputs. Firms in manufacturing and MSMEs also source for inputs direct imports at 0.8 per cent and 1.2 per cent respectively. This means disruptions in the external source markets have adverse implications to both firms in manufacturing and MSME operations in Taita Taveta County.

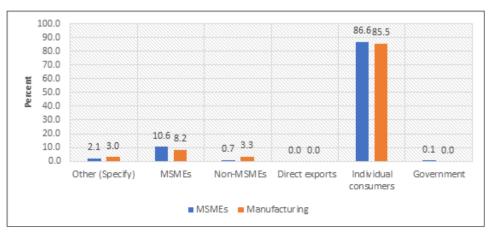


Figure 5.7: Source of material inputs

Level of innovation by firms in Manufacturing

Manufacturing establishments in Taita Taveta County were involved in both product, process and market innovations. More product innovations are seen under the micro category at 13.9 per cent, process (14.2 per cent) and market (17 per cent). Fewer innovations are observed in the small category at a rate of 0.8 per cent for product, process (0.8 per cent) and market respectively (0.8 per cent) (table 5.3).

Table 5.3: Level of innovation by firms in Manufacturing

Type of	Micro			Small		Medium			
innovation	Don't know	No	Yes	No	Yes	No	Yes	Total	
Product	0 (0)	2,303 (80.8)	396 (13.9)	63 (2.2)	24 (0.8)	63 (2.2)	0 (0)	2,849 (100)	
Process	0 (0)	2,294 (80.5)	406 (14.2)	63 (2.2)	24 (0.8)	63 (2.2)	0 (0)	2,849 (100)	
Market	0 (0)	2,216 (77.8)	483 (17)	63 (2.2)	24 (0.8)	63 (2.2)	0 (0)	2,849 (100)	

Source: KNBS, 2016

Access to credit for Manufacturing and MSMEs firms

According to the MSME 2016 survey, 65.8 per cent of MSMEs and 49.8 per cent of those in manufacturing applied for credit. The main sources of credit for establishments in manufacturing include commercial banks (28.5 per cent), micro finance institutions (27.8 per cent), public financing agencies and cooperatives (8.7 per cent). MSMEs largely rely on commercial banks (35.7 per cent), micro finance institutions (31.2 per cent), and saccos (8.7 per cent) (figure 5.8).

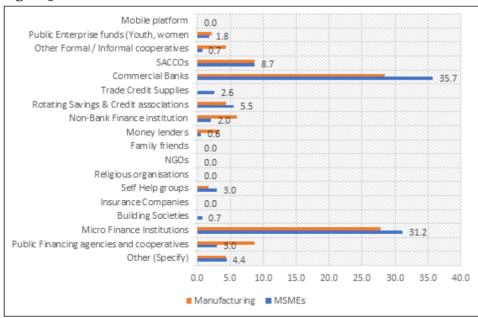


Figure 5.8 Sources of finance

Recent evidence from FinAcess 2019 provides further insights on sources of credit for businesses in Taita Taveta County. Businesses commonly obtain credit from the conventional sources such as shops (28.1 per cent), groups/chama (13 per cent), MFI (5 per cent), SACCOs (2.4 per cent), and family/neighbour (1.8 per cent). Emerging sources of credit for businesses in Taita Taveta county include digital loans (7.3 per cent) (figure 5.9).

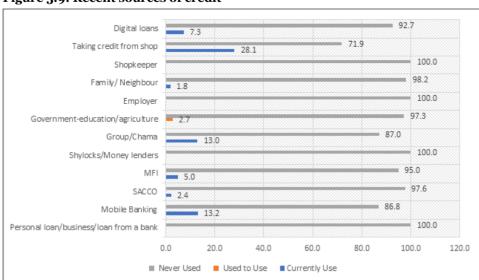


Figure 5.9: Recent sources of credit

Source: FinAcess, 2019

Purpose of credit

Figure 5.10 presents the main purpose of credit by both MSMEs and establishments in manufacturing. Generally, manufacturing firms require credit for: business refurbishment (35.5 per cent), and non-business purposes (24.6 per cent). MSMEs in Taita Taveta County require credit for business refurbishment (39.6 per cent), non-business purposes (14.5 per cent), purchase inventory (10.8 per cent), and working capital (4.6 per cent).

50.0 39.6_{35.5} 39.9 40.0 28.5 24.6 30.0 14.5 20.0 10.8 10.0 4.6 1.9 0.0 0.0 00 00 0.0 0.0 Working Refurbishing Pav debt Non- Business Other (Specify) Purchase Starting business Inventory Capital Purpose another business ■MSMEs ■ Manufacturing

Figure 5.10: Main purpose of credit

Source: KNBS, 2016

Constraints faced by manufacturing firms

The main constraints faced by firms in manufacturing include lack of markets (38.8 per cent), local competition (14.9 per cent), licenses (14.3 per cent), inaccessibility to electricity (5.5 per cent), poor access to water supply (4.4 per cent), and poor roads/transport (4.4 per cent) (figure 5.11).

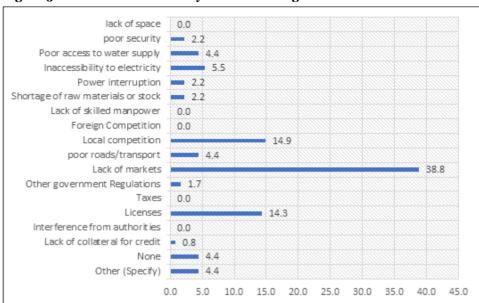


Figure 5.11: Constraints faced by manufacturing firms

Source: KNBS, 2016

b) Micro. Small and Medium Enterprises (MSMEs)

Taita Taveta County has 24,922 establishments⁴ with 23,260 (93.3 per cent) being micro, 1,308 (5.2 per cent) are small, 322 (1.3 per cent) are medium and 32 (0.1 per cent) 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 Taita Taveta County operate in the wholesale and retail trade; repair of motor vehicles and motorcycles (65.1 per cent), arts, entertainment and recreation (6.6 per cent), accommodation and food services (9.4 per cent), and manufacturing (11.3 per cent) (figure 5.13). Ideally, these are the sectors that have been affected most by the pandemic and need focus in achieving reengineering and recovery.

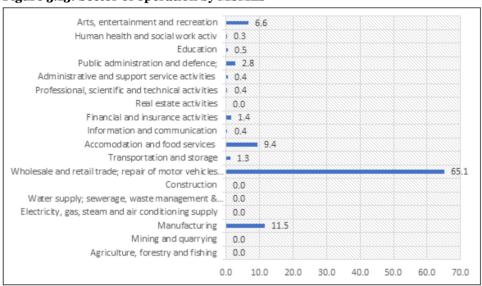


Figure 5.13: Sector of operation by MSMEs

Source: KNBS, 2016

⁴ After applying weights

Location of the businesses by tupe of premises

MSMEs in Taita Taveta County are largely located in commercial premises (31.4 per cent), market stall (17.8 per cent), building sites and road works (14.2 per cent), kiosk (12.8 per cent), and residential with special outfit (10.2 per cent) (figure 5.14).

Residential without special outfit 2.5 Residential with special outfit 10.2 Building sites and road works 14.2 Mobile/No fixed location (Hawking) 0.3 14 lua kali sheds Open ground without stand 1.7 Open ground with stand Kiosk 12.8 Open market 2.7 Exhibition 0.1 Market stall 17.8 Industrial site 1.8 Commercial premises Other (Specify) **1.0** 0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0

Figure 5.14: Location of businesses by premises

Source: KNBS, 2016

Due to income disruptions occasioned by COVID -19 MSMEs in Taita Taveta County faced difficulties in meeting their rental obligations considering quite a number are in commercial premises. According to the May 2020 KNBS COVID_19 survey 62.3 per cent of the non-farm businesses attributed non-payment of household rental obligations to reduced incomes/earnings while 37.7 per cent attributed the same to delayed incomes/earnings. For those involved in farm businesses, 66.7 per cent attributed the same to temporary layoffs/closure of businesses while 33.3 per cent were affected by reduced incomes/earnings.

Distribution of MSMEs by gender and size

Table 5.4 shows the distribution of MSMEs in Taita Taveta County by gender: 42.6 per cent are male owned, 38.2 per cent are female owned, while 19.2 per cent are jointly owned (male/female). For Micro establishments, 42.1 per cent are male owned, 39 per cent are female owned, while 18.8 per cent are jointly owned. Male owners also dominate ownership among small sized establishments at 52.7 per cent, females own 17.6 per cent, and 29.7 per cent are jointly owned. All large sized establishments ownership is fully controlled by females (100 per cent).

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

Gender	A11	Micro	Small	Medium	Large
Male	10,618 (42.6)	9,803 (42.1)	689 (52.7)	126 (39.1)	0 (0)
Female	9,527 (38.2)	9,076 (39)	231 (17.6)	189 (58.6)	32 (100)
Joint	4,777 (19.2)	4,381 (18.8)	389 (29.7)	8 (2.4)	0 (0)
Total	24,922 (100)	23,260 (100)	1,308 (100)	322 (100)	32 (100)

In terms of employment, the micro-sized establishments employ more people (48 per cent) compared to small (24.3 per cent), medium (23.1 per cent) and large (4.6 per cent) (table 5.5). Micro firms employ 25.7 per cent male and 22.3 per cent female and small sized employ 13.2 per cent male and 11.1 per cent female. Equally, more men are employed among medium and large establishments at 14.7 per cent and 2.9 per cent while females include 8.4 per cent and 1.7 per cent respectively. Overall, more men (56.6 per cent) are employed by MSMEs in Taita Taveta County than women (43.4 per cent).

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

Gender	Micro	Small	Medium	Large	Total
Male	24,300 (25.7)	12,510 (13.2)	13,924 (14.7)	2,765 (2.9)	53,499 (56.6)
Female	21,045 (22.3)	10,491 (11.1)	7,931 (8.4)	1,575 (1.7)	41,042 (43.4)
Total	45,345 (48)	23,001 (24.3)	21,855 (23.1)	4,340 (4.6)	94,541 (100)

Source: KNBS, 2016

Education levels of MSME owners

Education levels of MSME owners are highlighted in figure 5.15 as follows: secondary (46.2 per cent), primary (33.9 per cent), mid-level college diploma or certificate (9.9 per cent), and degree (3 per cent).

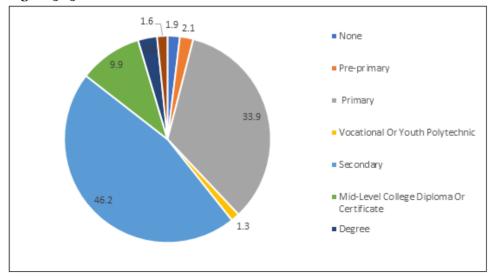


Figure 5.15: Education levels of MSME owners

Level of innovation by MSMEs

Table 5.6 presents the levels of innovation in Taita Taveta County by MSMEs according to size. Overall, there were low levels of innovation across MSMEs with 14.7 per cent involved in product, 7.3 per cent for process, and 15.2 per cent in market innovation for micro-sized enterprises. Regarding small-sized enterprises, 2.1 per cent engaged in product, 0.9 per cent process and 2.1 per cent market innovation. Medium sized enterprises were involved in product (0.3 per cent), process (0.3 per cent) and market (0.3 per cent) innovations respectively.

Table 5.6: Level of innovation by MSMEs

	Micro		Small	Small			Medium		Large					
Type of Innovation	Refused to answer	Don't know	No	Yes	Refused to answer	Don't know	No	Yes	No	Yes	Don't know	No	Yes	Total
Product	o (o)	63 (0.3)	19,457 (78.4)	3,653 (14.7)	0 (0)	0 (0)	785 (3.2)	523 (2.1)	259 (1)	63 (0.3)		32 (0.1)	0 (0)	24,803 (100)
Process	o (o)	63 (0.3)	21,295 (85.9)	1,815 (7.3)	0 (0)	0 (0)	1,078 (4.3)	231 (0.9)	259 (1)	63 (0.3)	0 (0)	32 (0.1)	o (o)	24,803 (100)
Market	o (o)	63 (0.3)	19,341 (78)	3,768 (15.2)	0 (0)	o (o)	784 (3.2)	524 (2.1)	259 (1)	63 (0.3)		o (o)	32 (0.1)	24,803 (100)

Source: KNBS, 2016

E-commerce

Participation in e-commerce by households in Taita Taveta County is below the national average. About 3.4 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 (3.9 per cent) than women (2.9 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 Taita Taveta County since fewer households participate in the same.

Turnover tax

Only 7.5 per cent of MSMEs in Taita Taveta County (1,864) had a previous monthly turnover of above Kshs. 83,333 which translates to Kshs. 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 main constraints faced by MSMEs in Taita Taveta County: lack of markets (33.5 per cent), licenses (15.8 per cent), local competition (11.6 per cent), shortage of raw materials or stock (3.2 per cent), lack of collateral or credit (2.6 per cent), poor access to water supply (2.6 per cent), poor security (2.4 per cent), and power interruption (2.4 per cent) (figure 5.16).

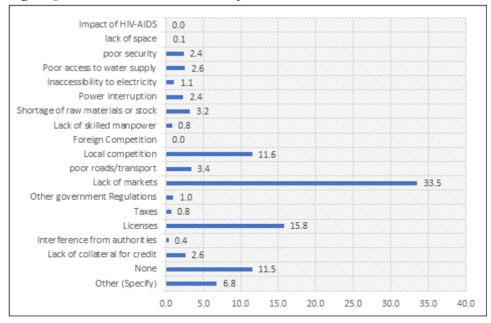


Figure 5.16: Main constraints faced by MSMEs

Source: KNBS, 2016

A study on County Business Environment for MSEs (CBEM) identified other constraints faced by MSMEs in Taita Taveta 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 Taita Taveta County. 100 per cent of the respondents report a decrease in their business activities due to the 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.

• Increased
• Decreased
• Not affected

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 reported a decrease of 4.6 hours in the mean working hours for household non-farm and farm businesses in Taita Taveta County which implies a deterioration in economic activities between the interview periods (figure 5.19). This could be as a result of Service and Agricultural activities considering they considerably form the main stay of the County.

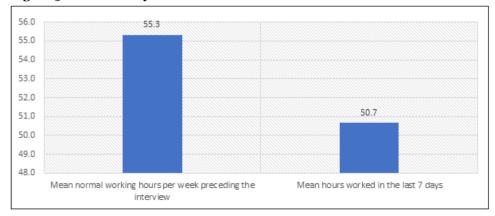


Figure 5.18: Labour dynamics on household non-farm and farm businesses

Source: KNBS, COVID-19 Survey 2020

The survey also shows wholesale and retail trade sector lost 6.5 hours in usual and actual hours worked while accommodation and food services were hard hit losing 18 hours in a week. This is an indicator of the adverse effects on service sector of Taita Taveta County due to the pandemic which means loss of productivity, output and employment. The manufacturing sector lost 13.9 hours.

Key Messages:

- a) The key sectors that drive the economy of Taita Taveta include: Services and Agriculture. Hence, support should be targeted to these sectors to ensure reengineering of the County economy.
- b) The main sub-sectors that drive manufacturing in the County are: wearing apparel; food products; furniture; fabricated metal products, except machinery and equipment; among others. These are sub-sectors that are considered essential in dealing with COVID-19 and are likely to experience increased activity with focus on food production, production of Personal Protective Equipment (PPEs) and hospital beds.
- c) The main constraints faced by firms in manufacturing include: lack of markets, local competition, licenses, inaccessibility to electricity, poor access to water supply, poor roads/transport.
- d) The following are the main constraints faced by MSMEs in Taita Taveta County: lack of markets, licenses, local competition, shortage of raw materials or stock, lack of collateral or credit, poor access to water supply, poor security (2.4 per cent), and power interruption.
- e) Access to credit perennially remains a constraint to MSMEs which hinders growth and expansion of businesses, even more so now during the pandemic. There is need to provide financial support to MSMEs that have demand, employ large number of people, and those that provide essential goods and services.

- f) COVID-19 presents opportunities that could be harnessed 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.
- g) Manufacturing establishments must also adopt to cope with the new guidelines which could include rearranging floor plans to allow for social distancing.
- h) Training and capacity building are important in assisting MSMEs to surmount the shocks faced during the pandemic but also allow for re-emergence.
- i) In terms of re-engineering, there is need to consider establishing support measures to re-vitalize and re-open businesses that collapsed during the crisis within the county.

5.2 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:

- Agro processing for value addition with important areas of focus include cereals, horticultural crops, nuts and oil crops, fibre crops, livestock, beef, dairy, leather production and processing.
- ii) The textile and wearing apparel sectors can be enhanced to provide PPEs for use within the County and potentially for the export market.
- iii) Exploration and processing of minerals such as iron ore, limestone, marble, magnetite, asbestos, graphite, Kaolin clay, copper, manganese, nickel and mica, quarrying, ballast and sand harvesting for both domestic and export markets.

Effects of COVID-19 on this sector

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

- (i) There has been an increased wave of innovations during the pandemic.
- (ii) have been faced with declining sales and revenues due to depressed demand and low circulation of money in the County, which is caused by loss of incomes by the residents.
- (iii) There is a decrease in trade activities in the County due to restrictions on movements due to fear of attending physical markets, where there is fear of contracting the disease.
- (iv) Businesses are faced with challenges of increased costs resulting from the need to comply with new protocols in form of; provision of handwashing and sanitization points, wearing of masks even for workers, rearrangement of floor plans for social distancing especially for manufacturers and awareness creation.

5.3 Emerging Issues

- (i) The County has waived market charges for traders.
- (ii) The County is working with KILRDI to trade people on value addition.
- (iii) The County has been collaborating with the government of Romania before the COVID-19 pandemic to establish some of the products that can be generated from this waste. This can be fast-tracked during and post-COVID-19 pandemic.
- (iv) There has been reduced income from traders, manufacturers and MSMEs and a corresponding decrease in taxes collected from them. This will affect implementation of Taita Taveta County's planned activities due to reduced projected revenues.
- (v) The need to identify and promote specific and emerging values chains as a result of COVID-19, and which Taita Taveta County has comparative advantage.
- (vi) Review all the ongoing interventions by the County and also the national government to assess their effectiveness and especially regarding trade, manufacturing and MSMEs
- (vii) 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 to:

- i) Establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, the County to inject some stimulus to cushion the businesses and traders through affordable credit, waiver of some County taxes, cess, and other charges.
- ii) COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitisers, hospital beds and ventilators. It is an opportunity to spur innovation and promote manufacturing and industry development and generation of jobs for the youth.
- iii) Establishments in the county to adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing.
- iv) Develop, in collaboration with the national government SME and Industrial Parks in the County as outlined in MTP III.
- v) Construct, equip and operationalize the Mineral Value Addition Centres (the Gemstone Value Addition Centre in Taita-Taveta as outlined in MTP III.
- vi) Carry out an intensive geological survey of industrial minerals (e.g. copper, manganese, iron ore and nickel) so as to attract investors to establish industries in the mining sector.
- vii) Promote PPP in industries establishment.
- viii) Promote rural and agro-based industries mainly in the high agricultural areas.
- ix) Fastrack establishment of dairy and poultry development industries; livestock-based processing industries; and agro-processing plants/ cottage industries.

6. Infrastructure

6.1 Transport and Roads

This sector has majorly been affected by the cessation of movement in both Mombasa and Nairobi County since Taita Taveta falls between the two counties. Issue with Tanzania border has drastically reduced flow of transportation. The county is facing a problem of alternative routes due to porous border (panya routes), which is the cause of increased COVID-10 cases.

6.1.1 Characteristics of the sector

Majority of households own a bicycle (18.6per cent) and a motorcycle (15.2per cent). Car ownership is at 3.5 per cent (KNBS, 2019). The main means of transport used in the County is walking at 53.34 per cent, followed by bicycle (bodaboda) 17.83 per cent, motorbike 13.98 per cent and PSV matatus at 10.28 per cent, Bus (Psv) 1.32 per cent, figure 6.1, while 82.56 per cent of the population had not changed the main means of transport (KNBS, 2020b). On average, residents travel 2.76 kilometers to their workplace at an average cost of Ksh 117.37. For the commute to school, residents spend on average Ksh 747.24 (KIHBS, 2015/16).

50
40
30
20
10
0
MAKING BUCKLES KATORSKE TUK, TUK BUSKS KINDOKSK VERICE OF HER

Figure 6.1: Main means of Transport

Source: KNBS COVID-19 Impact Survey 2020

The KNBS COVID-19 Impact Survey 2020 revealed that 38.68 per cent of the population reported a change in the cost of travel/commute, figure 6.2. The expenditure on transport increased by 46.76 per cent from Ksh 139 before February 2020 to Ksh 204 in May 2020 for a oneway trip. The main change (83.03per cent) in transport cost was attributed to increased fares for PSV. BodaBoda and TukTuk.

DECREASED DUE TO USE OF CHEAPER MEANS OF...

DECREASED DUE TO LOWER FREQUENCY OF TRAVEL

DECREASED DUE LOWER FUEL COST (Private car)

INCREASED DUE TO CHANGE OF RESIDENCE/JOB

INCREASED DUE TO CHANGE FROM PSV-MATATU...

INCREASED DUE TO CHANGE FROM PSV TO PRIVATE

INCREASED FARE (PSV, BODA BODA, TUK TUK ETC.)

Figure 6.2: Change in Cost of Main Means of Transport

Source: KNBS COVID-19 Impact Survey 2020

Residents had changed their travel patterns with 20.98 per cent of the population traveling less often, while 1.09 per cent travelled with the same frequency but with some difficulty, and 33.72 per cent were unable to travel. However, 24.19 per cent of the population did not change their travel pattern.

10 20 30 40 50 60 70 80 90

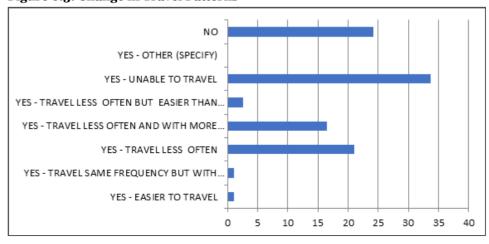


Figure 6.3: Change in Travel Patterns

Source: KNBS COVID-19 Impact Survey 2020

The pandemic has affected delivery of goods and services for 14.77 per cent of households

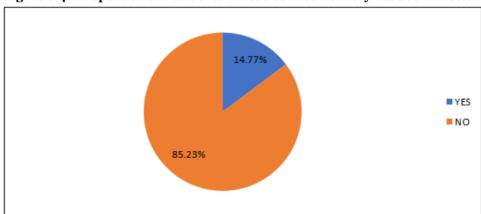


Figure 6.4: Proportion of Residents Whose Service Delivery has been Affected

Source: KNBS COVID-19 Impact Survey 2020

The County was allocated a total of Ksh 141,010,523 from the Road Maintenance Levy Fund towards road maintenance in the Financial 2017/18 (OCOB, 2019).

Road network

The county has a total of 6,022.06 Kilometres of classified road network. The paved County road network covers 63.27 KMs, while the paved National roads cover 272.32 KMs. Out of the total paved road network of 335.59 KMs, 52.4 per cent is in good condition, 26.7 per cent in fair condition and 17.5 per cent in poor condition. The unpaved road network in the county covers 2849.35 KMs (county roads) and 600.09 KMs (National roads), of this, 5.2 per cent is in good condition, 49.6 per cent fair and 45.2 per cent in poor condition as depicted in figure 6.5 (KRB, 2019).

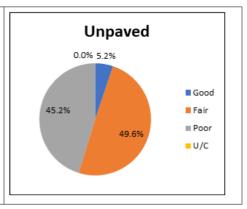
Paved

3.4%

17.5%

Good
Fair
Poor
U/C

Figure 6.5: Road condition mix-classified road network



Source: KRB, 2019

The unclassified road network in the County covers 2237.02KMs, with 901.09KMs of narrow roads, that is, road with a reserve of between 4 -9 meters, while there is a total of 1335.93KMS 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 road⁵. The county has a RAI of 48 per cent which is below the National Average of 70 per cent, indicating that access to transport in rural areas is below average (KRB,2019). This has negative implications with regard to sectors that rely on accessibility such as agriculture, trade and overall development. The road condition mix of the unpaved network at 45.2 per cent is a constraint to development.

6.1.2 Opportunities with COVID-19 in various sectors

The County can strategically improve the road network for economic development, while creating jobs for youth, women and vulnerable groups as espoused in the Roads 2000 programme⁶ on labour-based road development approaches.

The Roads 10,000 programme being implemented nationally by the Roads Subsector actors and specifically, the Low Volume Sealed Roads (LVSR)approach⁷ offers a strategic and cost-effective approach to improve rural accessibility in the County.

6.1.3 Emerging Issues

- Poor road conditions for unpaved network
- Low Rural Access Index

6.1.4 Recommendations

- i) Promote access for all to safe, age- and gender-responsive, affordable, accessible and sustainable land transport systems.
- ii) Encourage urban-rural connectivity by investing in sustainable transport and mobility infrastructure.
- iii) Identify a core rural road network for prioritization to improve the rural access index (RAI) from the current 48.0 per cent with a target to match the national average of 70.0 per cent.
- iv) Focus on increasing the share of unpaved roads in good and fair condition to above 62.0 per cent which is the national average. For the unpaved road network, focus on adopting the Low Volume Sealed Roads (LVSR) technology for greater network coverage cost effectively.
- v) 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 policy8.

 $^{5\} RAI\ defined: \underline{https://datacatalog.worldbank.org/dataset/rural-access-index-rai}$

 $^{6\} Roads\ 2000\ programme\ \underline{http://krb.go.ke/our-downloads/roadsper\ cent202000per\ cent20strate-gicper\ cent20plan.pdf}$

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

⁸ Roads 2000 programme $\underline{\text{http://krb.go.ke/our-downloads/roadsper cent202000per cent20strate-gicper cent20plan.pdf}$

- vi) 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 Goals9.
- vii) Collaborate with transport sector stakeholders to register transport operators into formal organizations to enable future County Government support and funding during times of emergency
- viii) Sensitize PSV and boda boda and tuk tuk operators on COVID-19 prevention measures and assist vehicle owners in retrofitting vehicle designs for social distance, hygiene and ventilation.
- ix) Expand the county capability for telecommuting and teleworking and develop relevant policies in support of the same.
- x) Re-develop bus parks and termini to address crowding and social distancing concerns stipulated in the public health guidelines.
- xi) 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.
- xii) Apply Performance Based Road Maintenance Contracting 10, with maintenance of the existing road network in good condition being a priority.

6.2 Information and Communication Technology

The county is connected to ICT. This sector has helped a lot in passing out messages related to COVID.

6.2.1 Characteristics of the sector

The analysis of the 2019 KPHC reveals that only 15.9 per cent of the conventional households in the county 'own' internet with 6.3 per cent owning a desktop, computer laptop or tablet. Internet access, ICT device ownership and TV ownership is particularly critical not only for access of COVID-19 information, but as well as supporting remote learning by the pupils as well as remote working, figure 6.6.

⁹ Sustainable Mobility for All: https://sum4all.org/implementing-sdgs

 $^{10\} Performance\ Based\ Road\ Maintenance\ Contracting:\ https://www.kenha.co.ke/images/pbc/oo-PBC-guideline-edition-1.1.pdf$

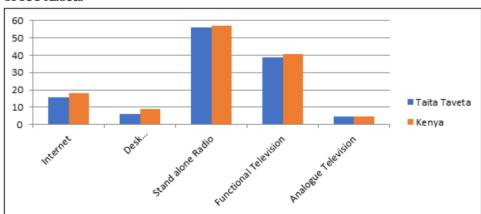


Figure 6.6: Per centage Distribution of Conventional Households by Ownership of ICT Assets

Source: ICT Data 2020; KNBS (2019), Population and Housing Census

Online shopping is not prevalent in the County. 3.4 per cent of the conventional households searched and bought goods/services online. There exists gender disparity in online shopping with more men (3.9 per cent) than women (2.9 per cent) undertaking online shopping.

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

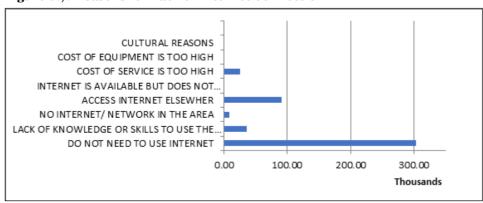


Figure 6.7: Reasons for Lack of Internet Connection

Source: ICT Data 2020; KNBS (2019), Population and Housing Census

Approximately 44 per cent of the internet users in the county rely on mobile phone for connectivity, with a marginal population of 50 per cent relying on mobile broad band that uses a sim card for connectivity, figure 6.8.

0%______6%

■ FIXED WIRED BROADBAND

■ TERRESTRIAL FIXED

■ MOBILE BROADBAND (USES SIM CARD)

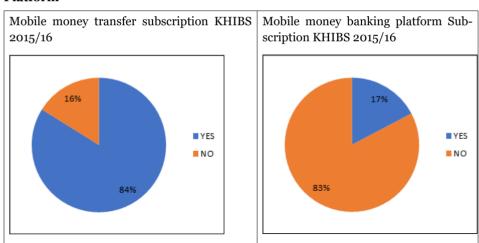
■ MOBILE PHONE

Figure 6.8: Type of Internet Connection

Source: ICT Data 2020

Approximately 54.9 per cent of the population aged 3 years and above own a mobile phone which is lower than the national average of 47.3 per cent. Approximately 84 per cent of the people in the county have a mobile money subscription compared with only 17per cent that have mobile money banking platform subscription (KHIBS 2015/16), figure 6.9.

Figure 6.9: Mobile Money Transfers Subscription and Mobile Money Banking Platform



Source: KNBS, 2016- KIHBS 2015/16

The county experience gender divide in use of internet and ICT devices as well as mobile money subscriptions. Both internet and ICT device use is higher among the male with 26.6 per cent of the men and 21.1 per cent of the women using internet, while 10.8 per cent of the men and 8.3 per cent of the women using Desktop/Laptop/Tablet devices (KPHC 2019). While the usage is below the national averages, the county recorded a similar gender disparity with the national averages in internet and ICT usage.

Constraints Faced

Some of the constraints faced include low household ownership of internet and ICT devices limiting potential use of ICT for livelihood support and Households perceive that they do not need to use the internet.

6.2.2 Opportunities for COVID-19 in ICT

• 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 the low of 54.9 per cent to 100 per cent in line with the global agenda for Universal Access to Mobile Telephony11
- ii) Harness the power of technology and use innovative solutions to bridge the gender digital divide.
- iii) Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund12 as a "last resort" in providing ICT access in remote areas where market forces fail to expand access.
- iv) Collaborate with IT personnel in Universities to support the development of ICT competence and skills among the public and bolster a digital economy.
- v) Improve the laws and regulations related to information infrastructure, establish standards for the construction of information infrastructure integrated with road, water and electricity infrastructure planning and development, especially for terrestrial IT infrastructure.
- vi) Negotiate with the public primary schools for community access to ICT infrastructure and collaboratively build and equip youth empowerment, ICT centers and ICT laboratories as provided in the CIDP.
- vii) Enhance internet connectivity to public buildings and key trade centres to boost e-commerce especially for MSMEs in trade and business. The NOFBI programme can be expanded to the sub-county administrative units to further enable deployment of e-governance solutions.
- viii) Make ICT a standalone sector for planning and budget allocation. This is aimed at giving strategic prominence to planning, budgeting and investment in ICT.
- ix) Review and implement ICT policies and procedures to manage ICT and mitigate cyber threats. Collaborate with the national Computer Incident Response Team (CIRT) and the Communications Authority (CA) towards managing cyber threats. This is because enhanced use of ICT is known to raise threats and risks related to cyber-crime, disasters, pandemics and misinformation.

¹¹ Universal access to mobile telephony: http://www.itu.int/itunews/manager/display.asp?lang=en&year=2007&issue=07&ipage=universal-telephony

¹² Universal Service Fund: https://ca.go.ke/industry/universal-access/purpose-of-the-fund/

7. Housing and Urban Development

The housing sector was very vibrant over the last 6 years with urbanization, especially around Voi, Mwateta, and Taveta. The availability of building materials has made the sector to be very vibrant. When COVID started, there was a ban in sand harvest and quarry harvest. The sector slowed down and once they started meeting the regulations, the sector has revived. Some houses are also done with clay blocks which is cheaper. This sector is up and running. The only restriction is the number of people operating in the site.

Majority of households are headed by men (67.28per cent) compared to women (32.72per cent) in the County (KIHBS, 2015/16). There are three urban centers in the County with a total population of 49.7 per cent males and 50.3 per cent females, table 7-1. The urban land area covers 113 square kilometers with a population density of 828 persons per sq.km

Table 7.1: Distribution of Population by Urban Centers by Gender

Urban Centre	Population	Male	Female
VOI	53,353	26,719	26,629
TAVETA	22,018	10,880	11,138
MWATATE	9,572	4,617	4,955
MAUNGU	4,713	2,328	2,385
WUNDANYI	4,118	2,076	2,042

Source: KNBS, 2019 - Kenya Population and Housing Census

7.1 Characteristics of the sector

The housing tenure is predominantly owner occupied at 66.4 per cent, with 33.6 per cent of the households under rental tenure. Individuals are the primary providers of rental housing at 85.3 per cent, followed by Private Companies (6.6per cent); and National Government (4.2per cent) figure 7.1; For those who own homes, 93.6 per cent constructed the houses while 1.0 per cent purchased the house and 5.4 per cent inherited their homes (KNBS, 2019).

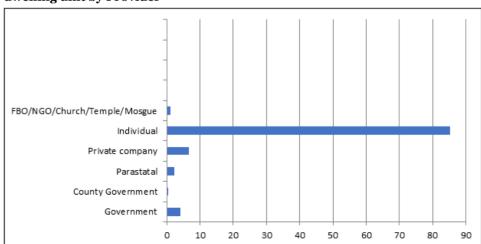


Figure 7.1: Distribution of households Renting/ Provided with the main dwelling unit by Provider

Source: KNBS, 2019 - Kenya Population and Housing Census

Housing Quality

On average, the main dwellings of houses in the County have 2.96 habitable rooms against an average household size of 4.23 persons in a household, translating to approximately 1.43 people per room. According to the UN-Habitat, overcrowding occurs when there are more than three people per room¹³. In terms of housing quality (building material), 62.2 per cent of houses are constructed using finished materials for walls, floor and roofing compared to 37.8 per cent constructed using rudimentary materials (KIHBS, 2015/16). Majority of households (94.9per cent) have iron sheets for roofing, bricks walls (28.6per cent) and Concrete/ Cement/Terrazo floors (53.0per cent) (KNBS, 2019).

Rent Payment

On average, rental households spend approximately Ksh 5739 on rent with a minimum of Ksh o and the maximum of Ksh 35000 (KNBS, 2020b). The county recorded a rent to income ratio of 19.46 per cent which is within the acceptable threshold of 30 per cent (KNBS, 2012/13).

¹³ Household crowding measure: <a href="https://www.ncbi.nlm.nih.gov/books/NBK535289/table/ch3.tab2/#:~:text=Overcrowdingper cent2ooccursper cent2oifper cent2othereper cent2oare,perper cent2ohabitableper cent2oroomper cent2o(88).&text=Crowdingper cent2ooccursper cent2oifper cent2othereper cent2ois,per cent2Drooms)per cent2o(89).

UNABLE TO PAY/WILL NOT BE ABLE TO PAY

TO PAY, ON TIME

PAID, NOT FULLY

PAID ON TIME

0 10 20 30 40 50 60

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 48.14 per cent of the population indicating inability to pay rent on the agreed date for April 2020, figure 7.2, compared to 26.63 per cent of the population that were able to pay rent on the agreed date and 67.43 per cent who paid rent on agreed date before COVID-19 pandemic, figure 7.3.

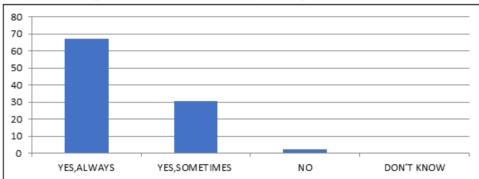


Figure 7.3: Proportion of Residents Paying Rent per Terms of Contract

Source: KNBS COVID-19 Impact Survey 2020 wave 2

The main reason that has made households unable to pay rent was attributed to reduced incomes /earnings, reported by 63.29 per cent of the population. The inability to pay rent was attributed to the COVID-19 pandemic by 93.79 per cent of the population, figure 7.4.

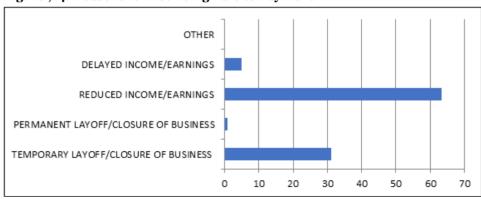


Figure 7.4: Reasons for not Being Able to Pay Rent

Source: KNBS COVID-19 Impact Survey 2020 wave 2

Majority of the households (86.84per cent) did not receive a waiver or relief on payment of rent from the landlord, with 4.1 per cent reporting a partial waiver and 2.05 per cent reporting a full waiver. To overcome the effects of Corona virus on payment on rent, majority 46.61 per cent of households renegotiated rent terms, while 35.89per cent of households did not take any measures. Approximately 10.33 per cent used personal savings to pay rent, figure 7.5.

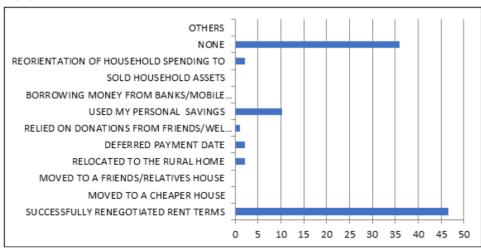


Figure 7.5: Measures Taken by Household to Mitigate COVID-19 Effects on Rent

Source: KNBS COVID-19 Impact Survey, 2020

With regard to primary energy source for cooking, 84.9 per cent of households rely on unclean sources of energy for cooking such as firewood, paraffin and charcoal, which could adversely affect respiratory health of women and children.

7.2 Opportunities with COVID-19 in Urban Development

• Existing stock of owner-occupied homes that can be improved using finished building materials for roofing, walls and floors.

7.3 Emerging Issues

The housing sector was very vibrant over the last 6 years with urbanization, especially around Voi, Mwateta, and Taveta. The availability of building materials has made the sector to be very vibrant. When COVID started, there was a ban in sand harvest and quarry harvest. The sector slowed down and once they started meeting the regulations, the sector has revived. Some houses are also done with clay blocks which is cheaper. This sector is up and running. The only restriction is the number of people operating in the site.

7.4 Recommendations

- Formulate urban development plans that integrate the smart cities and smart planning concepts to ensure continued services delivery and efficiency in service provision during emergencies.
- ii) Integrate wildlife life management, mining and mineral resource development with human settlement planning in County Spatial Plans with aim of achieving sustainable development.
- iii) Adopt programmes aimed at an increasing household access to clean energy sources and technologies for cooking to mitigate against exposure to respiratory diseases.
- iv) Develop and implement an addressing system with complete, correct and unique address data in line with the National Addressing System to be used in pandemic and disaster surveillance and emergency response.
- v) Develop a policy to promote home ownership to address the problem of rent distress during times of emergency.
- vi) Fastrack implementation of the affordable housing programme in partnership with the private sector targeting urban centers.
- vii) Avail appropriate building technology for use by the public in house construction and improvement in every subcounty, that responds to local cultural and environmental circumstances.
- viii) Develop and implement urban planning and design instruments that support sustainable management and use of natural resources and land in line with the New Urban Agenda and as mitigative measure to future pandemics and disasters.

8. Tourism

8.1 Characteristic of the sector

Taita Taveta County has immense potential to reap economic gains from tourism activities. There exists a wide range of tourist attractions with the County priding itself in being home to Tsavo East and Tsavo West National Parks. The key tourist attractions in the County include: Physical attractions / nature-based tourism: (Rolling volcanic landscape, extinct volcanoes, lava flows, caves and Mzima Springs; Yatta plateau – featuring the longest (300Km) lava flow in the world; Meandering Galana River and rapids; Aruba dam: Mudanda rock: Lugards Falls: Taita Hills comprising of Sagalla, Kasigau and Dawida massifs: Shetani lava: Shaimu: hills: 3 sister hills: chyulu hills: Perfect spots for rock climbing and campsites; Mwangeka and funju caves); Wildlife / safari (Tsavo East, Tsavo West and Chyulu national park with variety of game; game viewing, camping, cave exploration): private and community conservancies which include Lumo Conservancy: Cultural and heritage tourism (Wray museum; traditional songs and dances); Agro-forestry (indigenous forests with rare tree species); Eco-tourism; Medial tourism (herbalists and traditional doctors); The Tsavo East and Tsavo West National Parks together attract a total of 240,000 visitors annually; with Tsavo East attracting twice as many tourists as Tsavo West. Domestic and foreign tourists account for 56.4 per cent and 43.6 per cent of the visitors to the parks respectively.

The county is well endowed with tourist-class accommodation facilities. It has three starrated hotels (2 three-star and 1 one-star) with a capacity of 102 rooms and 208 beds, and 27 other facilities (lodges, tented camps, campsites, and guest houses) with a capacity of 1,321 beds. Accommodation and food services contribute 4.4 per cent of total GCP. During the 2013-2017 planning period, the county government spent only 0.6 per cent of the total budget to development of the county tourism sector. Given the potential of tourism for socio-economic development of the county, there is need to allocate more resources to development of the sector, especially on diversification of the tourism products.

Other constraints to growth and development of tourism in the county include Low fiscal efforts to raise local revenue from tourism which has been falling over time; increase in human-wildlife conflict occasioned by wildlife invading farming areas and predation of livestock. There is also low awareness by local communities on the benefits that can accrue from the Tsavo ecosystem. In addition, the road networks to tourist attraction sites are poor, which increases the cost of doing business; environmental degradation caused by over exploitation of forest through charcoal burning and uncontrolled wood harvesting. This is a key threat to survival of wildlife and development of ecotourism, and loss of biodiversity, drought, floods, landslides, and emergence of invasive species.

8.2 Opportunities with COVID-19 in Tourism Sector

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

8.3 Emerging Issues

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

8.4 Recommendations

- i) Improvement of sanitation in the county to deal with the COVID -19 and other potential pandemics, which are already a setback to development of tourism.
- ii) Rehabilitating roads leading into the national parks to increase accessibility.
- iii) Establishing tourism information centres.
- iv) Setting up community-based conservancies.
- v) Diversifying the tourism product offering: Prepare a tourism development master plan focused on tourism zoning, spatial and virtual connectivity, online marketing, product development, and quality standard of tourism services; promote domestic tourism by providing incentives and subsidies; cultural festivals

9. Health

9.1 Characteristics of the sector

In 2019/2020, the number of health facilities in the county were 118 which comprised of 112 primary health facilities and 6 hospitals. This was an improvement from a total of 81 health facilities in the previous year, 2018. The number of beds per 10,000 population is 7 against the WHO recommendation of 30 beds per 10,000 population.

Table 9.1: Health provision

Year	2018	2019/20
Health facility density		
Primary health facilities	78	112
Hospitals	3	6
Number of health facilities	81	118
Health facility density	1.4	1.7
Bed density		
Hospital beds	456	457
No. of Beds per 10,000 population	7	7
Human resource density		
Total workforce	781	2,914
Human Resources for Health (Technical)	595	740
Number per 10,000 population	19.9	21.2

Source: MOH, 2021

The health facilities and personnel serve a growing population of 340,671 people according 2019 census. In 2019, total health workforce was approximately 2,914 representing 21.2 health workers per 10,000 population which meets the WHO target of 23 health workers per 10,000.

Table 9.2: Percentage Distribution of the Population that reported Sickness/ Injury by Type of Health Provider in the County (per cent)

Type of Health Provider	Percentage Distribution of the Population
Government hospital	26.0
Government health centre	13.9
Government dispensary	43.6
Faith Based (church, Mission) Hospital / Clinic	6.0
Community Health	0.0
Private hospital / clinic	11.4

Nursing/ Maternity Home	0.3
Pharmacy/ chemist	0.0
Community health worker	0.4
Shop/ Kiosk	3.8
Traditional healer	0.0
Faith healer	0.0
Herbalist	0.2
Other	0.0
Number of Individuals ('000)	78

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 (43.6 per cent), followed by government hospitals (26 per cent), government health centres (13.9 per cent) and private hospitals at 11.4 per cent. About 6 per cent of county residents who reported illness also visited Faith Based (church, Mission) Hospital / Clinic.

Population with health insurance cover

The percentage distribution of the population with health insurance cover by type of insurance provider is presented in Table 9.3. In general, 23.4 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 87 per cent of the population. Private contributions to insurance cover were reported by 0.9 per cent of the population while Employer-Contributory was reported by 4.8 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 (per cent)

Source of Health Insurance	Percentage Distribution of the Population (per cent)
Population ('000)	358
Share of population with health insurance (per cent)	23.4
NHIF	87.0
Private-Contributory	0.9
Private-Non-Contributory	0.8
Employer-Contributory	4.8
Employer-Non-Contributory	0.9
Other	8.3
Number of Individuals ('000)	84

Source: KIHBS 2015/16

Place of deliveru

In the 2015/16 KIHBS, women in the county were asked the place where children aged 5 years and below were delivered. Table 9.4 shows the percentage distribution of children by place of delivery, in the county. About 20.3 per cent of children were delivered at home which below than the national percentage of 31.3 per cent. The proportion of children born in hospitals, health centres, dispensary/clinics was 51.2 per cent, 9.1 per cent, and 18.2 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	51.2
Health Centre	9.1
Clinic/ Dispensary	18.2
Maternity Home	0.5
At Home	20.3
Other	0.6
Not stated	0.0
Number of Individuals ('000)	41

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 48.9 per cent of the children aged 12-23 months were fully immunized against measles at 9 months while 13.2 per cent were fully immunized against measles at 18 months.

Table 9.5: Proportion of Children aged 0-59 Months Immunized Against Measles

		Proportion of Children
Vaccination Card	Yes Seen	65.1
	Yes, Not Seen	30.8
	No	3.3
	Not stated	0.8
Measles Vaccination	Measles I (At 9 months Card)	48.9
	Measles II (At 18 months Card)	13.2
	Measles II (Mother/ Guardian memory)	29.2
	Either (card or memory)	78.1
Number of Individuals ('000)		41

Source: KIHBS 2015/16

Health outputs

The county has 696 health personnel who include 7 medical consultants, 31 general medical officers 69 clinical officers and 363 nurses spread across public health facilities. The Doctor-population ratio stands at 1:19,138 while Nurse-population ratio stands at 1:1,142 compared to WHO recommendation of doctor or nurse -population ratio of 1:230. Nonetheless, the impact of COVID stretched far beyond mere registered number of cases in the county, for instance, the stigma attached to those suspected of being positive caused serious mental harm, and healthcare practices were disrupted. The complexities and dynamics of testing for COVID-19 had an impact on patient health-seeking behaviors and service delivery. Social dialogue is essential to building resilient health systems, and therefore has a critical role both in crisis response and in building a future that is prepared for health emergencies.

The most prevalent diseases in the County Are Malaria (38.7per cent), Upper Respiratory Tract Infection (URTI) (34.1per cent), Skin infections (9per cent), Diarrhea (4per cent) and Pneumonia (3per cent). Attempts to control malaria has seen 51.7per cent of children under 5 years sleep under treated bed nets, while 26.5per cent sleep under untreated bed nets. Overall, 30.8per cent of the population sleep under a bed net. The percentage population distribution by incidence of sickness for males stands at 20.3per cent while for females it is 29.2per cent. The average for both sexes is 25.2per cent. 1.23.3 Nutritional Status (Prevalence of Stunting and Wasting in Children Under 5 Years: Height-For-Age, Weight-For-Height, Weight-For-Age). According to the three anthropometric indices of nutritional status of children i.e. height for age stunting, weight for height wasting, and weight for age underweight, the percentage of children under 5 years classified as malnourished is 23.8per cent, 7.2per cent and 7.8per cent respectively for the three indicators above.

Free maternity services realized significant progress, delivery by skilled attendants increased from 58per cent (2015/16) to 88.8per cent in (2016/17). Women of the reproductive age (WRA) receiving family planning commodities increased from 85per cent to 90per cent during the period under review. Hospital delivery rate stands at 62.5per cent (DHIS, 2016) maternal deaths is 0.1per cent of total deliveries mostly caused by delays both from community and facility, other complication e.g. Post-Partum Haemorrhage. Hypertensive

disorders. New Ante Natal Care visits stands at 80.6per cent and mothers completing 4 anti-natal care visits stands at 78.6per cent

The HIV prevalence rate in the County currently stands at 4.1per cent as per NASCOP down from 6.1per cent in 2015/16. The number of people living with HIV (PLHIV) is approximately 11,000 in the County for the period under review. The rate of new HIV infections among the population has Increased among the youth. However, the new infections vary per subcounty, with the majority of the new infections coming from Voi sub-county due to ongoing economic activities. The number of HIV positive mothers receiving ARVs has increased from 376 to 402 in the period 2015/16 and 2016/17 respectively. Due to increased use of ARVs, the number of AIDS-related deaths reduced from 482 in 2014/15 to 375 in 2015/16 and further decreasing to. The number of PLHIV under ART increased from 11,209 in 2014/15 to 15,067 in 2015/16 before increasing to. The county government and partners support towards HIV/AIDs over the period under review has increased considerably resulting to the above gains

Table 9.6: Health indicators in Taita Taveta county

Key Health Indicators	County Estimates
Maternal and Child Services	
Skilled delivery (per cent)	62.5
Children born at home	37.3
Fully immunized child	88.8
Child Mortality	
Infant mortality (*/1000)	71
Under-5 mortality (*/1000)	87
Neo-natal mortality (*/1000)	0
Nutrition Status	
Stunted children (per cent)	23.8
Wasted children (per cent)	7.2
Underweight children (per cent)	7.8
HIV (per cent)	
HIV adult prevalence (per cent)	4.1
Children with HIV(No.)	0
ART adult coverage (per cent)	50
ART children coverage (per cent)	47

Source: KDHS, 2014; DHIS 2018.

Effects of COVID-19

Health operations in Taita Taveta County have been adversely affected by the COVID-19 pandemic. Out of fear, the number of people seeking health services has gone down significantly affecting the health revenue stream. In terms of preparedness, however, the county has put in place measures to mitigate the pandemic. The county has allocated Kshs.

101 million COVID-19 related issues and another Kshs. 76 million has been directed for any COVID related needs and Kshs. 25 million has been allocated for food rationing and water supply. Out of the the Kshs. 76 million shillings, Kshs. 25 million is set for recurrent expenditure while Kshs. 51 million for development expenditure which include isolation areas and quarantine centers. The county government has given a lot of priority to the front-line workers.

In support to the county, the national government and the county treasury has donated PPEs to the health department. In terms of isolation centres, the county had one isolation center per Sub County but currently all the cases have been moved to Taveta Sub County. The county through the ministry of health has ensured testing done daily, and to enhance this process, the county has been supported to set up laboratory however, there is need to monitor local transmission. In terms of screening of those coming into the county is done in three strategic area but this is proving to be unsustainable. The county is also a tourist destination and so, it has dispatched a team to all lodges and hotels to advise them on how to comply with the health measures that they need to put in place before re-opening. In line with the Universal Health Coverage, the county set aside funds for drugs to stock the county health facilities; however, the ineffectiveness of operation at KEMSA has slowed the county's access. The county recruitment of health workers is still on going.

According to data available on COVID-19 testing survey of 2020, 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 5.8 per cent in 2020 (COVID-19, Wave 2 survey). Further only 0.9 percent of the population indicated that at least one household member had failed to seek health services and 87.9 per cent of the population indicated they will be willing to be tested if there was mass testing for COVID-19.

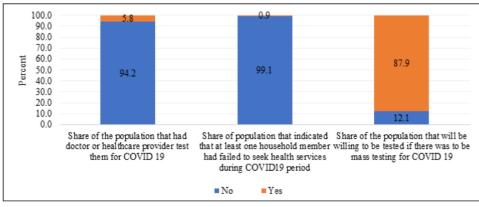


Figure 9.1: COVID-19 Testing, 2020

Source: COVID-19 Wave 2 (June 2020)

Taita Taveta county is leading in the Gender Based Violence this is attributed to the cultural practices such FGM which is still rampant in the region. The cultural adherents have continued with the practice against the uncircumcised women. Some nurses have been accused to be involved in such practices in collusion with older women. Through an initiative by the Sauti Ya Wanawake Pwani, which is an implementing partner of the Peace Initiative Kenya project in the county, is trying to address these gender issues.

This practices that have influenced gender inequality has also led to high school drop-outs rate among girls exposing them to health risk. The Somali community, which one of the main communities in Taita Taveta County is leading on the FGM, practices at 98 per cent. The county has put in place various initiatives such as the Save Our Queens Campaign campaigns which is at the forefront of condemning the practice

Relevant stakeholders involved in campaigns against FGM and GBV include the county government, Judiciary, National Police Service, children's and health departments, International Rescue Committee (IRC) and Sauti Ya Wanawake Pwani among others.

The human resource for the county of Taiata Taveta has been affected just like other counties, employment have been lost by those in the private sector, and being the home for the tourism, the county's service sector and those employed therein have been affected negatively. For the health sector, the county government has hired more health workers during this period; this step goes a long way in meeting the counties commitment to the Universal Health Coverage. As a way of enhancing the capacity, the county government through the ministry of health in collaboration with the national government has provided trainings on COVID-19 to the community health workers. The county has also provided protective gears to the health workers

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

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

The county is relying on the government for financial support to cushion the already strained county budget. The focus for the locally produced COVID-19 protective apparels is a very significant avenues, various groups from TVETs to the local enterprises have embarked on the production of masks locally at an affordable price, this not only cushion the locals from expenses on the same but it also gone a long way in providing revenues as well as income. The economy is also opening and with the awareness created the fear of not going to the hospital by the sick, which affected the health sector financially, is fading by each passing day. The hotel industry has been highly affected, and jobs lost, however, with the continued flattening of the curve and the opening up of the economy the sector is expected to open up.

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

services from the hospitals and other health centers. This will increase revenue collection in the county.

The main raw materials in the health sector including the services offered by health professionals and other employees were also affected by the pandemic. Medicine and drugs are also key materials. County is also producing masks, which are in high demand during this COVID-19 period. The access and provision of these materials were affected by the outbreak of the pandemic, the demand outweighed the supply.

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

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

There is a strong interlinkage between health and other sectors of the economy. This because health of individual is paramount. Therefore, running the other sector need to be in good health. The county held stakeholders' meeting led by the governor to improve coordination during this pandemic while also working with different partners to provide their proposed interventions. There was a training for the organization of health workers in the region to build their capacity in managing COVID-19 and using personal protective equipment. There is an enhanced collaboration within the Jumuiya ya Pwani regional block counties, which has resulted into training of the health officers and all the frontline staffs. This collaboration has also seen enhanced intercountry screening and testing centralized at the Coast general hospital.

Additionally, due to reduced social contact many meetings have been taking place virtually. This has provided an opportunity for the development of ICT. This has saved the county money, which could have used in the movement from place to another, conference hall fee as well as accommodation for her staff. This has also promoted of ICT and other communication channels within the county hence speedy transfer of information. The pandemic has also led to utilization of local capacity in production of masks and PPEs. This has promoted growth of local industries, hence creating employment. It has also challenged the county government hence exposing the health sector since it lacked enough ICU beds. More attention is now being given to the sector leading to improved health services.

9.2 Opportunities with COVID-19 in Health Sector

There is an enhanced collaboration within the coastal regional block counties, which has resulted into training of the health officers and all the frontline staffs. This collaboration has also seen enhanced intercountry screening and testing centralized at the Coast General Hospital.

Additionally, due to reduced social contacts many meetings have been taking place virtually. This has provided an opportunity for the development of ICT. This has saved the county money, which could have used in the movement from place to another, conference hall fee as well as accommodation for her staff. This has also promoted of ICT and other communication channels within the county hence speedy transfer of information. The pandemic also presents an opportunity for the utilization of local capacity in production of masks and PPEs. This will promote growth of local industries, hence creating employment.

9.3 Emerging Issues

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

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

9.4 Recommendations

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

- (i) The health sector requires enhanced investment in health systems, including in the health workforce, capacity building of community health workers and the medical officers on COVID-19, upgrading of working conditions and provision of requisite health commodities and equipment, especially in relation to personal protective equipment and occupational safety.
- (ii) There is need create awareness on availability and importance of free maternity services and address other constraints to access of maternal health services in the county to address fear of contracting COVID-19 in event of visiting a health facility. In addition, the County needs to consistently allocate resources towards nutrition specific and sensitive programmes in the various sectors by establishing specific budget lines for nutrition support initiatives.
- (iii) The county to enhance COVID-19 sensitization to the community through Health promotion messages and distribution and printing of IEC materials, provision of

- hand washing facilities to the community level, provision of hand washing soap and fumigation exercises in the markets and other busy towns, learning institutions and health facilities.
- (iv) Adopt and strengthen community health outreach programs to sensitize its members to adopt proper health seeking behaviors that could have been affected due to the stigmatization that comes along with the pandemic. Attention will be payed to expectant women on the need to attend regular antenatal clinics for checkup and the caregivers of children on the importance of immunization.
- (v) Enhance COVID-19 sensitization to the community through Health promotion messages and distribution and printing of information, education and communication (IEC) materials, provision of hand washing facilities to the community level, provision of hand washing soap and fumigation exercises in the markets and other busy towns and health facilities.
- (vi) Provide frontline caregiver mental and physical health assessment and support during the COVID-19 pandemic. Psychological support will be given to families of frontline health care workers affected by the working conditions and stringent measures effected during COVID-19 response period.
- (vii) Promote construction, upgrading and equipping of health facilities through additional funding to health sector, the county to equip Wesu district hospital and Taveta district hospital, this will enable the county to achieve the CIDP 2018-2022 goal of improving health Service Delivery.
- (viii) Promote and support public and community health including the installation of hand washing facilities in homes and institutions such as schools, workplaces and health care facilities within Mombasa County; and encouraging the population to wear face masks in the public places.
- (ix) Address the mental health needs including those of the health workforce, mental illnesses from depression, especially in response to shut-downs, and economic downturns
- (x) Prepare and enroll high number of health officers to offer fair fundamental types of assistance all through a crisis.
- (xi) promote and support public and community health including the installation of hand washing facilities in homes and institutions such as schools, workplaces and health care facilities within Taita-Taveta county.

10. Education and Training

10.1 Characteristics of the sector

The county's total enrolment in pre-school is 10,230, of whom 48 per cent are boys and 52 per cent girls. The total enrolment in primary schools is 65,035, boys making up 48per cent (26,225) and girls' 52per cent (28,820). The drop-out rate in primary education is 1.8per cent for boys and 1 per cent for girls. There are a total of 1,384 teachers in primary schools, giving a teacher-pupil ratio of 1:39. A large fraction of the community (47per cent) is distributed within 5 Km and more of a public primary school, while 26.8per cent and 26.3per cent are distributed within 0-1 Km and 1.1-4.9 Km of a public primary school respectively.

The non-formal education is made up of the adult and continuing education centres. There are approximately 4 non-formal education centres in Taita Taveta County with each sub county having one centre.

The total enrollment in secondary schools is 10,857, which comprises 5,495 boys and 5,362 girls. The enrolment of boys and girls in secondary schools is almost proportionate. Since the drop-out rate stands at 5.2per cent and 1.7per cent for girls and boys respectively, and in primary education enrolment of girls is higher than that of boys, this is an indication that the transition rate from primary to secondary is higher for boys than girls. For both sexes, the transition rate (from primary to secondary) is 67.5per cent. There are 461 teachers serving the 85 public secondary schools in the County. This translates to a teacher-pupil ratio of 1:23. The average years of student's attendance for secondary school are four years, with a GER of 108.6per cent. In terms of community distribution by distance to the nearest public secondary school, 10 per cent of the community lives within 0-1 Km of a public secondary school. Those that live within 1.1-4.9 km are 36.1per cent, while close to 44per cent of the community live within 5 Km or more of a public secondary school.

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

The Gross Attendance Rate (GAR) for pre-primary school was 114.8 per cent while that of primary school and secondary school was 109.4 and 74.3 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, 124.2 per cent, compared to that for males, 107 per cent. The GAR for primary school was higher for males, 113.5 per cent, compared to that for females, 105.4 per cent. The GAR for secondary school was higher for females, 80.5 per cent, compared to that for males, 66.9 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 78.4 per cent, 86.7 per cent and 43.6 per cent, respectively.

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

Education Level	Gender	Gross Attendance Ratio	Net Attendance Ratio
	Male	107	76.0
Pre-Primary School	Female	124.2	81.3
	Total	114.8	78.4
	Male	113.5	88.5
Primary School	Female	105.4	85.0
	Total	109.4	86.7
	Male	66.9	34.2
Secondary School	Female	80.5	51.6
	Total	74.3	43.6

Source: KIHBS 2015/16

Basic education gross and net enrolment rate

The preprimary gross enrolment rate in the county was 89.8 per cent in 2019 and while the net enrolment rate was 64.6 per cent. The Gross Primary and Secondary enrolment rates stood at 110.0 per cent and 78.5 per cent respectively in 2019 while the Net enrolment rates (NER) were 87.8 per cent and 50.3 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	2019
Gross Enrollment rate (GER) (per cent)	89.8
Net Enrollment rate (NER) (per cent)	64.6
Gender parity index	1.00
Primary	
Gross Enrollment rate (GER)(per cent)	110.8
Net Enrollment rate (NER) (per cent)	87.8
Gender parity index	0.96
Secondary	
Gross Enrollment rate (GER) (per cent)	78.5
Net Enrollment rate (NER) (per cent)	50.3
Gender parity index	1.08

Source: KNBS (2022)

High rate of school dropouts can be attributed to factors like Harsh environment, Early marriages mostly among the girls, teenage pregnancies where girls drop out of school

after becoming pregnant for the fear of ridicule by colleagues, Lack of school fee due to poverty especially if one is admitted in a boarding school, Drug and Substance abuse, school absenteeism by teachers and pupils and indiscipline among some pupils leading to expulsion.

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

Literacy

The analysis of literacy is based on respondents' self-assessment as no reading and writing tests were administered during the data collection. Further it was assumed that anybody with secondary level of schooling and above could read and write. The percentage distribution of population aged 15 years and above by ability to read and write is presented in Table 10.3. The proportion of literate population in the county was 88.5 per cent with the male population being more literate (92.1per cent) compared to their female counterparts (85per 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	Literate	88.5
county	Illiterate	11.1
	Not Stated	0.4
	Number of Individuals ('000)	225
Male	Literate	92.1
	Illiterate	7.6
	Not Stated	0.3
	Number of Individuals ('000)	112
Female	Literate	85
	Illiterate	14.5
	Not Stated	0.5
	Number of Individuals ('000)	113

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 44.1 per cent of the population do not have any

educational qualification. This is below the national percentage of 49.7. Only 1.1 per cent of the population has attained university degree. The proportion of the population with CPE/KCPE qualification is 30.9 per cent and that of KCE/KCSE qualification is 11.7 per cent.

Table 10.4: Percentage Distribution of Population by Highest Educational **Oualification**

Highest Educational Qualification	Percentage Distribution of Population
None	44.1
CPE/ KCPE	30.9
KAPE	0.3
KJSE	0.1
KCE/ KCSE	11.7
KACE/ EAACE	0.3
Certificate	5.1
Diploma	3.3
Degree	1.1
Basic/post literacy certificate	0.2
Other	0.1
Not Stated	2.9
Number of individuals ('000)	316

Source: KIHBS 2015/16

Percentage distribution of Taita Taveta 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 52.4 per cent while that of females was 59.4 per cent. for all persons who reported to have attended school, 9.2 per cent of males and 8.2 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 2.2 per cent and 1.3 per cent, respectively.

Table 10.5: Percentage Distribution of Residents 3 Years and above who had ever Attended School by Highest Level Reached, and Sex for Taita Taveta County (per cent)

Educational Level	Gender	Percentage Distribution of Population 3 Years and above
Pre-primary	Male	9.2
	Female	8.2
Primary	Male	52.4
	Female	59.4
Post primary vocational	Male	5.5
	Female	2.7
Secondary	Male	22.3
	Female	19.1
College (Middle-level)	Male	5.3
	Female	5.8
University	Male	2.2
	Female	1.3
Madrassa / Duksi	Male	О
	Female	О
Other	Male	0.3
	Female	0.6
Not Stated	Male	2.9
	Female	2.9
Number of Individuals ('000)	Male	160
	Female	156

Source: KIHBS 2015/16

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

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

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

ICT in education

The closure of schools as necessitated by COVID-19 pandemic has seen the loss of learning and teaching time. But of concern is the limited school infrastructures in line with the COVID-19 government guidelines in preparation to re-opening of schools but the county has plans to put up more structures though the new normal would need to be considered. In terms of network coverage, the entire county is not fully networked hence limited access to the e-learning programme for the larger portion of school children at home. The e-learning program at home has thus been strained and inaccessible to many children due limited access and capacity in ICT integration in education. The network coverage across the county and within households is locking many from taking up the e-learning programme. According to the survey on the effect of COVID-19 the data attributes the low uptake of e-learning to the fact that very few households have internet access and the requisite tools for the e-learning programme. Although all schools at 100 per cent had access to the digital literacy programme, only 15.9 per cent of households had access to internet while on 6.3 per cent of households have desktop computer, laptops or tablets as shown in Figure 2 below. Another challenge is the inability of the private schools to sustain their teachers while they are not in operation.

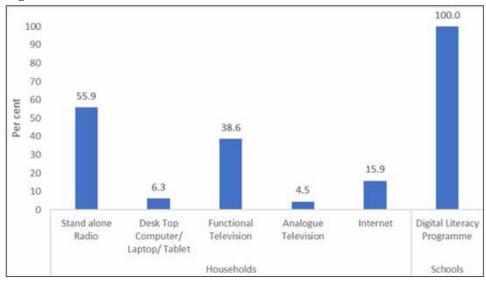


Figure 10.1: Access to ICT in Households and Schools

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

Education is linked to all the sectors. However, during this pandemic, the health sector is very significant for it defines when and how the operations in schools will resume. The guidance from both the county government and the national government is of essence for the operation of the sector too. The sector is working together with the health ministry as well as monitoring the situation as is strive to put the required measures in place in readiness to the school re-opening. Other linkages include agriculture, tourism industry and the private sector. The sector is also directly linked to the ICT which has come the new norm for most operations in the country.

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 and various tailors hence creating employment and income for youth. It will however be important to address issues of standards and quality of the local produced PPEs. COVID-19 pandemic has also provided opportunity for the county government to forge partnerships to ensure enough network coverage across all the sub-counties and counties in the 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 homes. Learning from homes will also reduce accidents and injuries among pupils at school. It will also reduce school drop outs as parents will be able to closely monitor their children at home.

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 to allow for adequate social distancing; deployment of ECDE teachers and provision of sanitation facilities.
- (ii) The county to involve communities to mobilize learners when schools will be reopening process and while deepening implementation of COVID-19 mitigation measures. The county to combine community participation and large-scale direct communication campaigns to parents, and where possible, increase attendance options to accommodate all children, including those with highest risk of dropping out, also promote back to school campaign and community outreach to ensure that no child is being dropped out of school due to COVID-19 emergency.
- (iii) The County to prioritize projects that improve school water, sanitation and hygiene facilities and management in order to reduce future effect of similar or related outbreak while promoting public health in learning institutions.
- (iv) The county to promote remedial/catch up lessons for learners who might have lagged behind also schools to utilize ICT platforms and have a depository of teaching and learning materials that learners could use at their own time and while at home.
- (v) The county to provide financial or in-kind support, such as school feeding, to help families overcome the increased costs of attending school, also provide psychosocial support to teachers and learners.
- (vi) Concerted efforts will also be required to fight drug and substance abuse among the youths in the county. This can be done through counseling and ensuring that they are not idle especially this period when learning institutions are locked.
- (vii) Government needs to come in and support private institutions which are facing threat of closure due to losses as a result of closing school indefinitely. This can involve giving grants and loans to the private schools.

11. Social Protection

11.1 Characteristics of the sector

According to the KNBS census 2019, Taita Taveta county has a population of 340,671 of which 1.9per cent are the elderly and 1.4per cent are people living with disabilities. The overall poverty rates in the county stand at 22per cent which is lower than the national average of 36.1per cent. The county's food poverty levels are at 27per cent and 24per cent of the total population is multidimensionally poor. Further, about 21per cent of the children population is stunted as shown in Table 11.1 below. The impact of the COVID-19 to the county's economy cannot be gainsaid.

The county government of Taita Taveta has prioritized social protection programmes within the county. The county has a total of 845 households under the CT-OVC Program programme. Wundanyi, Mwatate and Voi have a recorded 925, 924 and 1,061 respectively, totaling to some 3, 755. The total number of children under the program is around 18,775 in the county. The county out of cultural practices and belief systems the social protection nets such as the National Health Insurance Schemes have been a preserve of a few, women inequality that is rampant in the region has kept many women out of it. However, with collaboration with various stakeholders and the national government, the county government has put up initiatives to see more women registered in the scheme.

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 the dearth of family member which affected about 28 per cent of the county households followed by the droughts or floods which affected 18.6 per cent of the households and large rise in price of food which affected 9.2 per cent of the households. Other major shocks in the county include severe water shortage (8 per cent), Livestock dearth (6.9 per cent) and Household business failure (4 per cent)

Table 11.1: The proportion of households by the First Severe Shock in the County

First Severe Shock	The proportion of households (per cent)
Droughts or Floods	18.6
Crop disease or crop pests	2
Livestock died	6.9
Livestock were stolen	1.2
Household business failure, nonagricultural	4
Loss of salaried employment or non-payment of salary	2.5
End of regular assistance, aid, or remittances from outside the household	0.4
Large fall in sale prices for crops	2.5
Large rise in price of food	9.2
Large rise in agricultural input prices	1
Severe water shortage	8
Birth in the household	1
Death of household head	1
Death of working member of household	1
dearth of other family member	28
Break-up of the household	1
Bread winner jailed	0
Fire	0
Robbery / Burglary / Assault	2
Carjacking	-
Dwelling damaged, destroyed	0
Eviction	-
Ethnic/ Clan Clashes	-
Conflict	0
HIV/ AIDS	1
Other	4
Number of households with Shock ('000)	91,000

Source: KIHBS 2015/16

Distribution of Social Assistance Reneficiaries

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, 48 per cent of the households received cash transfers. A higher proportion of households received transfers from within the country (79per cent), mainly from individuals (84per cent) while external transfers constituted 15 per cent.

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

		Beneficiaries
	Total Number of Households	102,000
	Households receiving transfers (per cent)	48
From Inside Kenya	Individual	28,476
	Non-Profit Institution	530
	National Government	2,404
	County Government	427
	Corporate Sector	591
Inside Kenya		32,427
Outside Kenya		64
Total		31,839
Number of households that received transfers		49,000

Source: KIHBS 2015/16

The county together with the NHIF and the African Medical and Research Foundation (AMREF) have supported the civic education alongside churches and mosques in the region. This has seen registration of almost 150,000 women in the NHIF scheme in the county through Afya Bora Mashinani program. This drive was supported by the county at a tune of ksh 3 million with a remarkable result of 75,000 residents signing up hence access to affordable medical services. The county further set aside ksh 40 million in the Financial Year 2018/2019 for the enrolment in the NHIF. This has enhanced access the Universal Health Coverage to many across the county

The social protection program within the county has been hindered by the socio-cultural practices. The women mostly lacked the marriage documents to qualify for being registered having been married traditionally. The regulation guidelines by the NHIF to only cover a single spouse and a maximum of five children as beneficiaries making it difficult for this part of the country where majority are having more than one spouse, however, the

government stopped these regulations as retrogressive and punitive giving the region and other a reprieve to up the program. The county is marred by a lot of social challenges to both the youth and women. Most of the issues affecting the women such as the rampant Sexual and Gender based Violence as well as domestic violence, and with the COVID-19 that has forced everyone to stay at home the situation has not been any better more so with the teens following the closure of schools. Teenage pregnancies and the FGM programs are the main challenge for the young people and school pupils out of school currently.

Open air markets were closed which mostly serve as place of trade. Most people in this market are females. This has therefore affected their welfare in terms of finances and access to food and other goods. This has an impact of lowering their living standards. Livestock markets had also been closed making it hard for people to sell their livestock which serves as a main source of income. This has therefore reduced their income with some operating at losses. Shops and Kiosks, social centers such as club and bars, hotels have been affected by the curfew and social distance requirements thus reducing the amount of income that they 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. Potential sources for revenue were adversely affected by the floods and COVID-19. However, through lifting of up restrictions and the measures taken by the county on local business is picking up which would eventually revive the revenue stream though it might take time but there are positive signs to that effect. County support to the Small and Medium Enterprises and different business industries within the county to help revive the revenue base. Financial support from the national government was crucial in facing the pandemic.

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

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

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

Additionally, social protection is directly related to education. The more one is educated the more is informed of existing welfare schemes. Educated people also are aware of the need for and importance of engaging in social protection programmes such as insurance and investment for future to benefit after retirements. With good education, one is able to understand government role in ensuring good life for its citizens. Trade and industry play an important role bettering life of the residents. This is where majority of people derive their livelihood from especially those engaging SMEs. The profits and savings obtained from business is used in feeding the family members as well as insuring them in future.

The tourism industry is one of the most important industries in the county. A large per cent of the residents in the county derives their source of livelihood from tourism. With the onset of the COVID-19 pandemic, the county experienced a reduction in tourist arrivals due to imposed travel restrictions. With almost zero inbound tourists coming to Kenya since March 2020, the county lost visits to the national parks declining by 46 per cent (or 110,400 tourists). This implying a loss in revenue and livelihood by tourism value chain players equivalent to KSh.4.4 billion¹⁴ and park entry fees worth Ksh.165.6 million¹⁵.

11.2 Opportunities with COVID-19 in social protection

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

11.3 Emerging Issues

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

11.4 Recommendations

COVID-19 pandemic created effects with immediate and long-term economic consequences for children, PWDs, elderly and their families. In an effort to strengthen social protection

¹⁴ Tourist arrivals declined by 110400. Assuming average length of stay per tourist is 4 days, spending at least KSh.10,000 per day; total loss in revenue is 110400 x 4 x 10,000 = KSh.4,416,000,000.

 $^{15 \}quad http://www.kws.go.ke/sites/default/files/parksresorcesper cent3a/kenyaper cent2owildlifeper cent2oserviceper cent2o2020-2021per cent2oconservationper cent2ofees.pdf ; 110400 foreign tourists x sh.1500 park entry fee = KSh.165,600,000$

response in face of a similar pandemic, the county Government to:

- i. Create awareness to workers on the available social protection services such as the NHIF specially in the informal sectors.
- ii. 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, also design and implement a disability grant to all those who are severely disabled, and who are above the age of eligibility for the infant grant and below the age of eligibility for the old age pension.
- iii. Undertake research to get a better understanding of the actual situation of disability and chronic illness in Taita-Taveta County, and to map existing initiatives to improve effective service delivery.
- **iv.** Promote interventions towards the expansion of social protection initiatives targeting elderly persons in the community.

12 Labour Participation

12.1 Characteristics of the Sector

The main economic activities in the county are agriculture, where the most current venture of horticultural production is in the Taita Hills. Other economic activities are the tourism industry that has boosted the services sector and the transport sector. Strategies to flatten the COVID-19 curve such as, social distancing, stay-at-home orders, travel and mobility restrictions have resulted in temporary closure of many hospitality businesses in the county and significantly decreased the demand for hotels that were allowed to continue to operate under the COVID-19 rules. All these had a negative impact on the livelihood of workers who used to work in hospitality industry.

With the loss of jobs in the Small and Medium Enterprises the livelihood of people working in these sectors were directly or indirectly affected, particularly youths as the sector employs most of the young population. In addition, the reduction in operation hours and restriction on movement in and outside Nairobi and Mombasa County had negatively impacted on the transport sector with many relying on it rendered jobless. The loss of jobs in the matatu and boda-boda industry had directly impacted on the lives of the youth as some residents avoided public means of transport in fear of contracting the virus. The impacts of the pandemic were also felt on the service sectors as it affected workers in both private and public sector with several people working in restaurants and bars being left jobless due closure as ordered by the government.

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

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

	Male	Female	Total
Population	150,452	146,728	297,180
Working	82,561	77,948	160,509
Seeking Work/ No Work Available	10,802	6,169	16,971
Persons outside the Labour Force	57,056	62,577	119,633
Not Stated	33	34	67
per cent Working	88.4	92.6	90.4
per cent Seeking Work/ No Work Available	11.6	7.3	9.6

Source: KNBS 2019

Distribution of Population Age 5 Years and above by Activity Status, and Sex in the County is shown in Table 12.1 above. An assessment on county labour force indicates the County population aged 15-64 years (labour force) was estimated at 177,480 people of whom 160,509 were working and 16,971 were seeking work representing an unemployment rate of 9.6 per cent (Kenya Population and Housing Census, 2019).

Effects of COVID-19

The pandemic led to loss of jobs amongst residents of Taita Taveta county. From the May 2020 KNBS COVID_19 Survey, 25.6 per cent of the county labour force worked at least for 1 hour for pay; 13.5 per cent had never worked, 11.7 per cent of employees did not attend to work due to COVID-19 while 74.0 per cent of employees working without any pay. On average, workers in the County lost 12.0 hours per week due to COVID-19.

During the pandemic, about 4.5 per cent of workers in the county were casual workers 21.5 per cent were regular workers (full time), 7.6 per cent employees were working as part time. However, about 39.5 per cent of workers reported decrease in income while only 1.3 per cent of people reported to have experienced increased income. These could be the people working in the health sector who are supplying medical equipment such as masks and PPEs. About 6.3 per cent of workers indicated to have benefited from government tax exemptions which indicates about 93 per cent did not benefit from National government tax relief for low-income-earning persons, a reduction in the top Pay-As-You-Earn (PAYE) rate, and other changes such as cash transfers, credit relief, lower VAT, and a corporate tax cut.

Effect of COVID-19 on Jobs Effect of COVID-19 on Incomes 100.0 910 910 80.0 500 70.0 500 60.0 410 45.5 115 19.7 50.0 20 5 40.0 30.0 Share of Casual Worker Regular Worker- Regular Worker- Regular Worker-Share who 20.0 12:6 population that Full Time Part Time Gasennal handled from 10.0 worked at least 1 Tex Exemption 13 hour as a PAID announced by nn enologee the government No response Deceased Income Increased Income

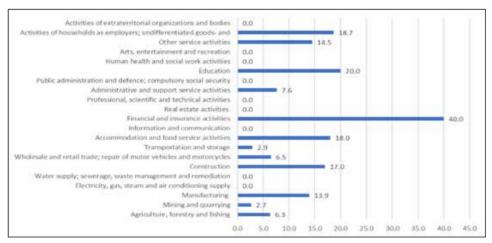
Figure 12.1: Effects of COVID-19, 2020

Source: May 2020 KNBS COVID-19 Survey

From the May 2020 KNBS COVID-19 Survey, workers in financial and insurance activities reported the highest level of hours lost in a week (40.0 hours) followed by workers in education sector who lost 20.0 hours week. Those in accommodation and food services lost 18.0 hours while construction and manufacturing lost 17.0 and 13.9 hours, respectively. In addition, workers in transport and storage lost 2.9 hours while those in administrative and

support services lost 7.6 hours, respectively. Workers in agriculture, forestry and fishing lost 6.3 hours in, while wholesale and retail trade lost 6.5 hours.

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



Source: May 2020 KNBS COVID-19 Survey

Further, 39.0 per cent of workers in Taita-Taveta county recorded decreased income; 74.0 per cent recorded working as unpaid workers; and 11.7 per cent never attended to work due to COVID -19 related activities. In private sector schools, teachers and other workers lost their incomes. Some other businesses such as bars, hotels, market centres were closed, leading to reduced business activities. On average, the county lost 12.0 hours in service sector which contributes 54.0 per cent of County GCP will potentially negatively affect its economy. At one point all operations were scaled down and employees were working on rotation basis.

For the general public- the county relies a lot on tourism-workers were sent on compulsory leave and others laid off completely. Food suppliers, tour guides, curio shop operators were also affected.

12.2 Opportunities with COVID-19 in human resource sector

The county government have been provided with the opportunity to use digital platforms to enable remote access to jobs for their employees where the Human Resource Management will have an essential role to play in navigation of the situation caused by the pandemic. There have been notable efforts by the county government to invest more money in training health workers. The county government now has an opportunity to reskill its employees and develop strategies (mid- and post-pandemic strategies) to adapt to the emerging issues.

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

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

12.3 Emerging issues

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

County is not well prepared in terms of response to health-related risks such as the current COVID-19. Opportunities within the Jumuiya ya Pwani 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) Improve access to finance for small and medium enterprises through lending institutions for sustained business. In addition, build capacity in areas related to marketing, operations, finance and human resource development to enhance the chances of survival of SMEs.
- (ii) Share the up-to-date and relevant information about COVID-19 symptoms and disease prevention recommendations among the county employees. County to use only credible sources of information, such as the Ministry of Health (MoH) and will establish a dedicated hotline or conduct a series of remote seminars with relevant health professionals to facilitate question and answer sessions with employees.
- (iii) Provide a psychological and financial support to employees, such as emergency assistance, additional insurance coverage, regular payroll payments.
- (iv) Enhance universal health access to collectively financed health services for all, including uninsured workers and their families. Invest in Community and public health including community health workers, water, sanitation, immunization and disease prevention measures.
- Build workplace resilience to public health emergencies and outbreaks of infectious diseases in all sub-counties.

13 Conclusion and Key recommendations

13.1 Conclusion

Fiscal policy

The county total revenue has significantly grown over the years as the Government focus on enhanced services to improve the livelihood of its residents. Total revenue has grown by 109 per cent from Ksh 2.79 billion in FY2013/14 to Ksh 5.83 billion in FY 2020/21. The amount realized in FY 2020/21 was 96.0 per cent of the annual budget allocation of Ksh 6.11 billion. The performance was an improvement from the 83.4 per cent target attained in FY 2019/20. Budget execution as measured by absorption rate has been deteriorating over the review period. Average overall absorption rate stands at 77.5 per cent. Average development budget absorption rate stands at 48.9 per cent while that of recurrent expenditure stands at 90.8 per cent. County wage bill has been growing tremendously at the expense of development expenditure. Between fiscal years 2013/14 and 2018/19 county wage bill was on an upward trend and on average accounted for 51.2 per cent of expenditure, while development expenditure has been plummeting attaining an average of 18.6 per cent over the same period. Further the pending bills have remained high over the review period with development related pending bills accounting for 62.6 per cent of pending bills portfolio.

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 COVI-19 pandemic period, the County also suffered from desert locusts, floods and livestock diseases. The County's agricultural productivity is also affected by: - variable and extreme weather events; low agro-processing and value addition opportunities; dependence of rain fed agriculture; low access to quality and affordable inputs; low marketing opportunities; low access to major off-farm services including extension, climate and market information, and credit services; pests and livestock diseases; farm losses and post-harvest waste; and poor and inadequate infrastructure. This adversely affects the productivity of the sector and impairs marketing and consequently places livelihoods and food security at risk especially in times of emergencies. The analysis calls for strategies to enhance productivity, profitability, and resilience of the sector for improved livelihoods.

Water sanitation and hygiene

The county relies more on surface water, water from springs, dug well, as well piped water into plot among urban and peri urban households, which calls for the need for protection of water catchment areas. Sanitation coverage remain high in the county with majority

of households access to pit latrine with slab and flush to septic tank. This presents an opportunity for the county to increase sanitation coverage to increase its additional revenue collection from sanitation services.

Manufacturing, Trade and MSMEs

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

Infrastructure, housing, and urban development

The main means of transport used in the County is walking followed by bicycle (bodaboda). The paved county road network covers 63.27 KMs, while the paved National roads cover 272.32KMs. Out of the total paved road network of 335.59KMs, 52.4 per cent is in good condition, 26.7 per cent in fair condition and 17.5 per cent in poor condition. The status of ICT access and use in the county is low, especially among households. The perception of that the individual does not need to use the internet, access to internet elsewhere than home and lack of knowledge and skills on internet are the leading reasons that the people of in the County do not have internet connection. The housing tenure is predominantly owner occupied at 66.4 per cent, with 33.6 per cent of the households under rental tenure. Majority of the households (86.8 per cent) did not receive a waiver or relief on payment of rent from the landlord, with 4.1 per cent reporting a partial waiver, despite inability to pay due to the pandemic.

Tourism

Taita Taveta County has immense potential to reap economic gains from tourism activities. There exists a wide range of tourist attractions with the County priding itself in being home to Tsavo East and Tsavo West National Parks. The county is well endowed with tourist-class accommodation facilities. Given the potential of tourism for socio-economic development of the county, there is need to allocate more resources to development of the sector, especially on diversification of the tourism products. Other constraints to growth and development of tourism in the county include Low fiscal efforts to raise local revenue from tourism which has been falling over time; increase in human-wildlife conflict occasioned by wildlife invading farming areas and predation of livestock. There is also low awareness by local communities on the benefits that can accrue from the Tsavo ecosystem.

Health

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

Education and training

The County 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

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

Human resource

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

13.2 Kev recommendations

Fiscal policu

To steer the county towards achieving its budgetary objective and development goals contained in the ADPs and CIDP, the county to ensure that the ongoing projects are completed before launching new project sand clear any pending bills and arrears owed to suppliers. 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 and improve budget execution and absorption of development budget by harmonizing project implementation cycles to budgeting and fast-track exchequer releases.

Agriculture, Livestock and Fisheries

To successfully build resilience and enhance growth of the agriculture sector, the County to: explore partnerships to develop agro-processing and value addition capacities at the County; expansion of water harvesting projects and sustainable irrigation; scale up conservation agriculture, post-harvest management, plant and keep drought-tolerant crops and livestock breeds; link farmers to diverse product markets; strengthen the County's institutional capacity in disaster surveillance and management; enhance farmers access to critical agricultural inputs and services and build their technical capacity to act on information obtained; provision of storage and cooling facilities; natural resource

management; and strengthen agricultural cooperatives to enhance marketing.

Water sanitation and hygiene

To build resilience and mitigate the effect of COVID-19, the county to; increase water supply in households, institutions, and public places through drilling of boreholes, dams, and access to piped water in all the sub-counties. Promote the use of safe and improved toilets in schools, health care facilities, workplaces, and public places by connecting households to piped sewer. Promote handwashing as a measure against COVID-19.

Manufacturing, Trade and MSMEs

In sustaining growth in the Manufacturing, Trade and MSMEs sector, the County to: Establish an emergency rescue package for businesses and traders hard-hit by the effects of COVID-19 in the short run. The emergency Fund, supported by development partners and other stakeholders, can be used to identify and support the most vulnerable businesses and entrepreneurs affected by COVID-19. Further, the County to inject some stimulus to cushion the businesses and traders through affordable credit; waiver of some County taxes, cess, and other charges; COVID-19 has increased demand for locally produced goods in the County, and especially Personal Protective Equipment (PPEs), sanitisers, hospital beds and ventilators. It is an opportunity to spur innovation and promote manufacturing and industry development and generation of jobs for the youth: Establishments in the county to adopt to the new pandemic guidelines including rearranging floor plans to allow for social distancing; Develop, in collaboration with the national government SME and Industrial Parks in the County as outlined in MTP III: Construct, equip and operationalize the Mineral Value Addition Centres (the Gemstone Value Addition Centre in Taita-Taveta as outlined in MTP III; Carry out an intensive geological survey of industrial minerals (e.g. copper, manganese, iron ore and nickel) so as to attract investors to establish industries in the mining sector; Promote PPP in industries establishment; Promote rural and agrobased industries mainly in the high agricultural areas; Fastrack establishment of dairy and poultry development industries; livestock-based processing industries; and agroprocessing plants/cottage industries.

Infrastructure, housing and urban development

In addressing the prevailing challenges, the county to encourage urban-rural connectivity by investing in sustainable transport and mobility infrastructure; Collaborate with the Communications Authority and telecom service providers to utilize the Universal Service Fund as a "last resort" in providing ICT access in remote areas where market forces fail to expand access; and fastrack implementation of the affordable housing programme in partnership with the private sector targeting urban centers.

Tourism

Among other recommendations, the county government of Taita Taveta will improve sanitation in the county to deal with the COVID -19 and other potential pandemics, which are already a setback to development of tourism, rehabilitate roads leading into the national parks to increase accessibility and establish tourism information centres.

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 to allow for adequate social distancing; 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.

Human resources

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

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