Assessing Labour Productivity for Vihiga County

By Cecilia Naeku and Esther Irungu

Overview of the County

Vihiga County is a member of the Lake Region Economic Bloc (LREB) and is one of the six economic Blocs. The county is a non-Asal county with less than 10 per cent aridity. The county land size stands at 531.3 km², making it one of the smallest counties in the country. It has six Sub-Counties namely: Emuhaya, Vihiga, Sabatia, Luanda, Hamisi, and Kakamega Forest.

Key Highlights

The productivity of Vihiga county is characterised by the following:

(i) The share of the agriculture sector has increased over time although maize yields have declined. The services sector dominates the county gross value addition. Manufacturing share is declining in the industry sector while transport and storage has a dominating share in the services sector.

(ii) The quality of labour is high with various indicators above the national average, but stunting is high. For the essential infrastructure interventions are required to improve access to electricity, improve sanitation, as well as internet connectivity.

(iii) While majority are employed in agriculture mixed farming, manufacturing textile, and wearing apparel and wholesale and retail services, the productivity of labour is low which means it is important to unlock the potential in the sectors.

(iv) Labour productivity is lower than the national average. The services sector has the highest labour productivity while agriculture has the lowest labour productivity. In industry sector, the highest productivity is in construction with manufacturing having the lowest. In the services sector, the non-market services have the highest productivity which means market services potential need to be exploited.

To improve productivity

(i) Secure and enhance human capital, implement nutritional programmes to address stunting and promote transition to secondary school to support in upgrading the skills engaged in the various sectors.

(ii)   Create an enabling environment to support the private sector activity. This including improving access to electricity and internet connectivity. This will serve to support growth of MSMEs.

(iii) Exploit the potential for textile industry which employs the highest in the manufacturing sector in the county. This is by strengthening its integration to the textile value chain and supporting production of raw materials.

(iv)   Transformation of agriculture is a priority. This can be achieved through diversification of livestock products and integrating them to the leather and dairy farming. The county also has indigenous chicken and supporting the poultry value chain will promote the small farmers. In addition, is to support maize production which has potential with increased cultivated land and subsidized farm inputs to improve the yields. This is critical for food security.

Vihiga County Economic Performance

Vihiga County contributes on average 0.3 per cent of the National Gross Value added with an average GVA of Ksh 57,7747 million. The GVA per capita for Vihiga County is Ksh 97,923 with an average population growth of 3.7 per cent and overall poverty levels at 48.8 per cent. Vihiga County has shown a steady growth in GVA with an average growth rate of 3.50 per cent from 2013-2022 which is lower than the national average growth of 4.37 per cent as shown in Figure 1. The highest growth rate was in 2018 and lowest in 2014.

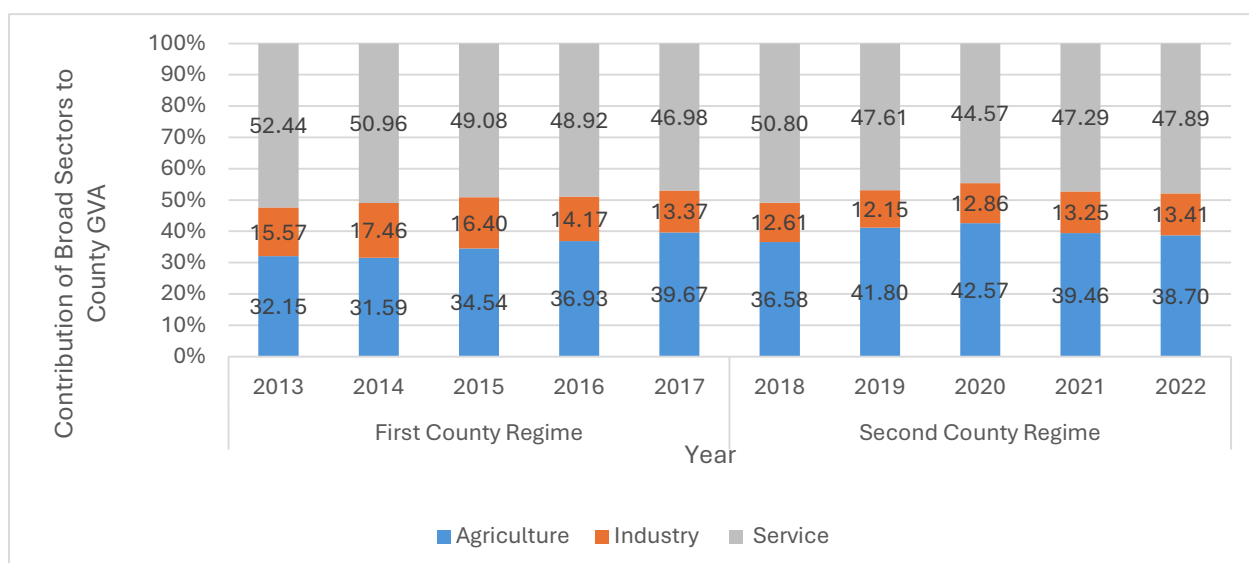## Figure 1: Vihiga County GVA growth rate
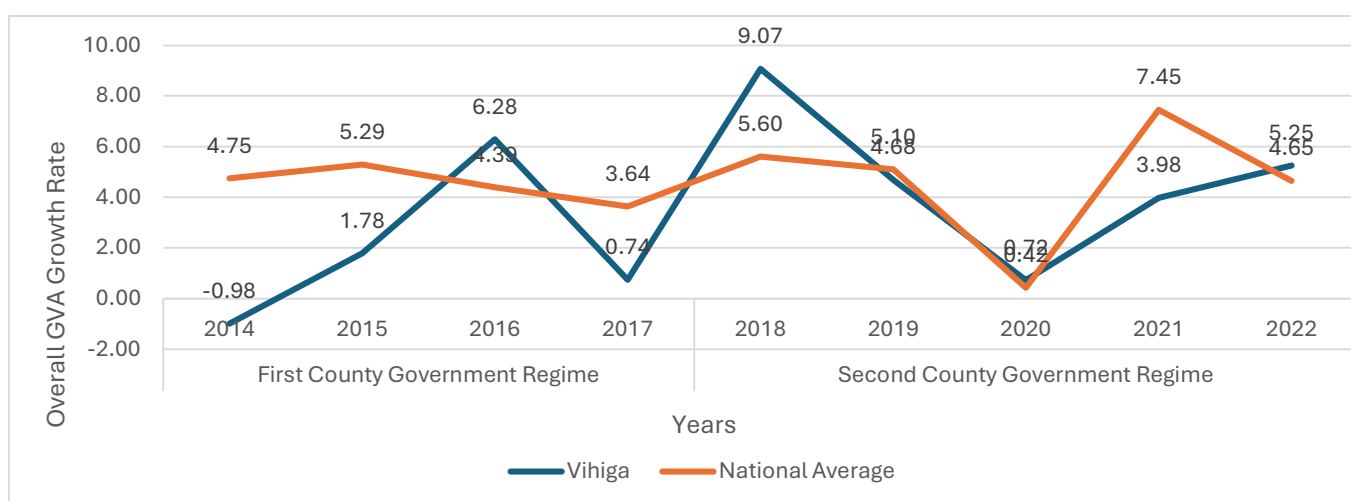
Data Source: KNBS 2023-Gross County Product

Sectoral Analysis of GVA

The services sector is dominant in Vihiga County with an average contribution to GVA of 48.65 per cent. The agriculture sector is second, contributing an average of 37.40 per cent to the GVA while industry contributes about 14.13 per cent as shown in Figure 2.

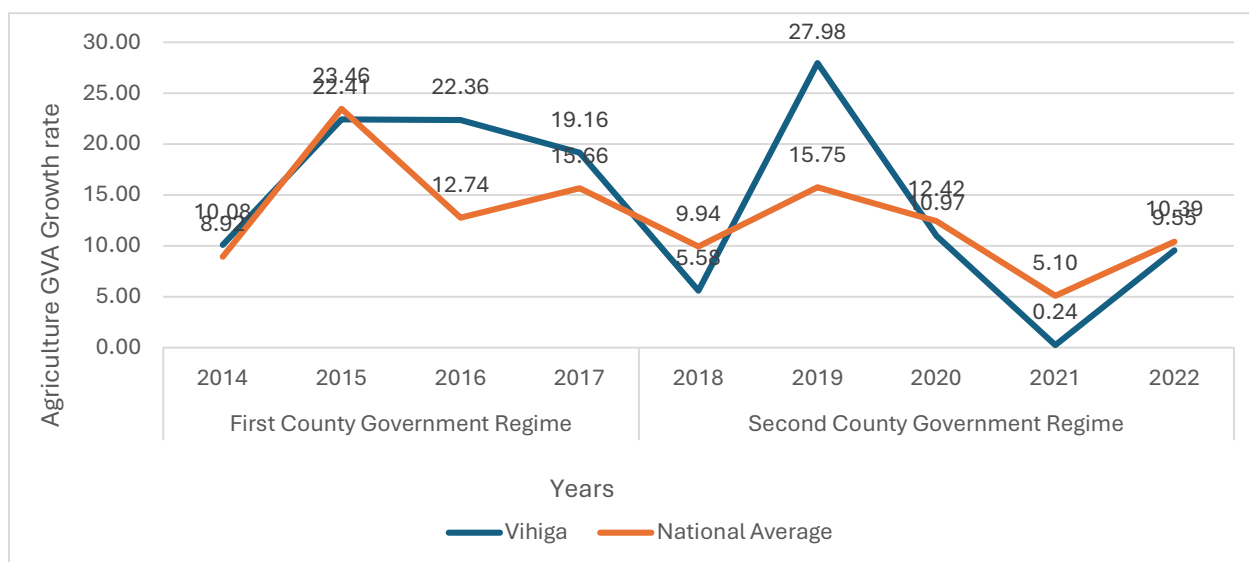**Figure 2: Contribution of broad sectors to Vihiga County GVA**

Data Source: KNBS 2023-Gross County Product

Agriculture sector

The average growth rate of agriculture GVA in 2013-2022 is 14.26 per cent, above the national average of 12.71 per cent as shown in Figure 3.
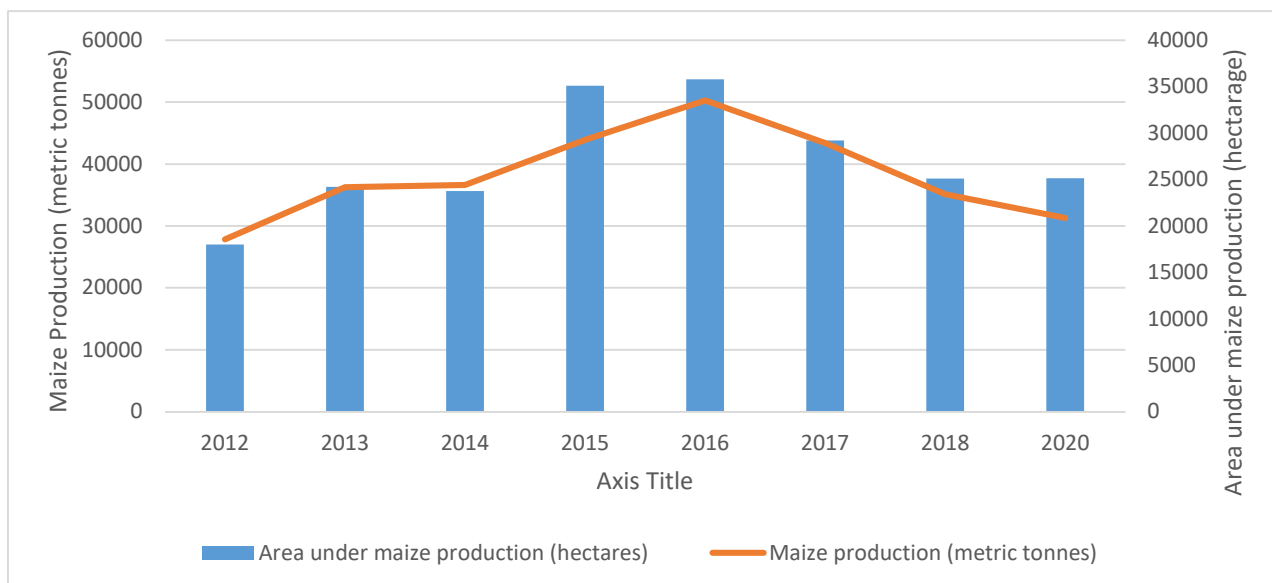
Figure 3: Vihiga County agriculture GVA growth rate

Data Source: KNBS 2023-Gross County Product

Maize, the main stable food in the country is also the main food crop produced in Vihiga County. Both maize production and area under maize production has been fluctuating over time Figure 4.

**Figure 4: Maize production and area of maize harvested**

Data source: National Information Platform for Food and Nutrition (NIPFN)

Livestock production in Vihiga County is on a smaller scale when compared to crop production. The most common types of livestock in the county are beef cattle and dairy cattle. Indigenous chicken dominates poultry production. Despite having a lower percentage of dairy cattle, milk has the highest total value in the county, and beef and poultry meat also have higher values. Mutton has a lower value despite the higher percentage of sheep kept indicating consumption preference factors as observed in Figure 5.

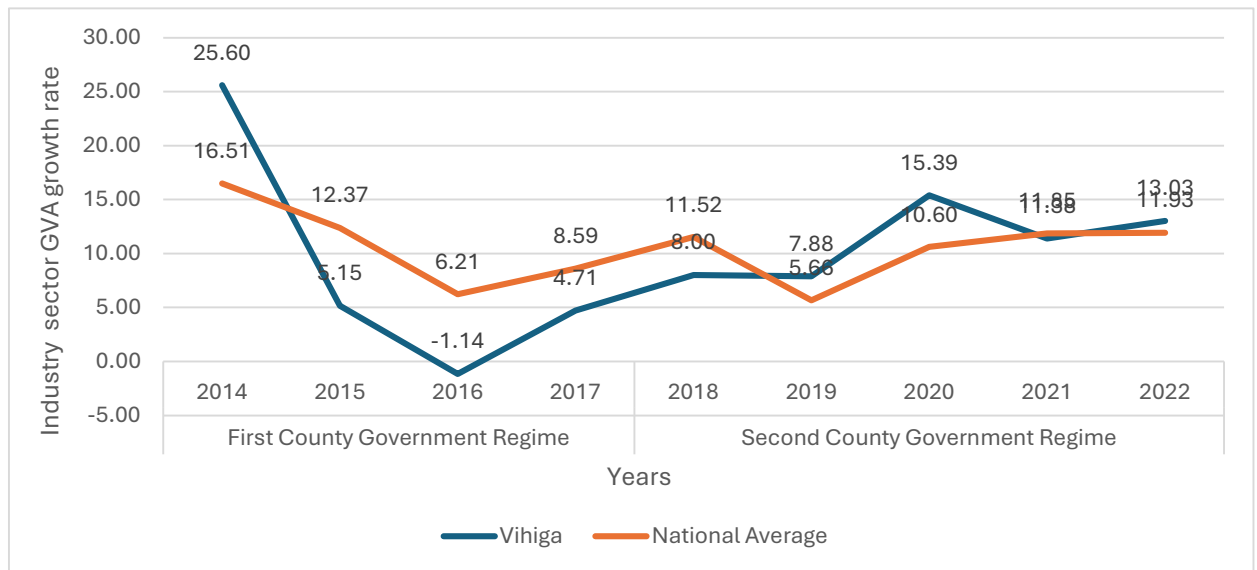**Figure 5: Livestock production statistics**
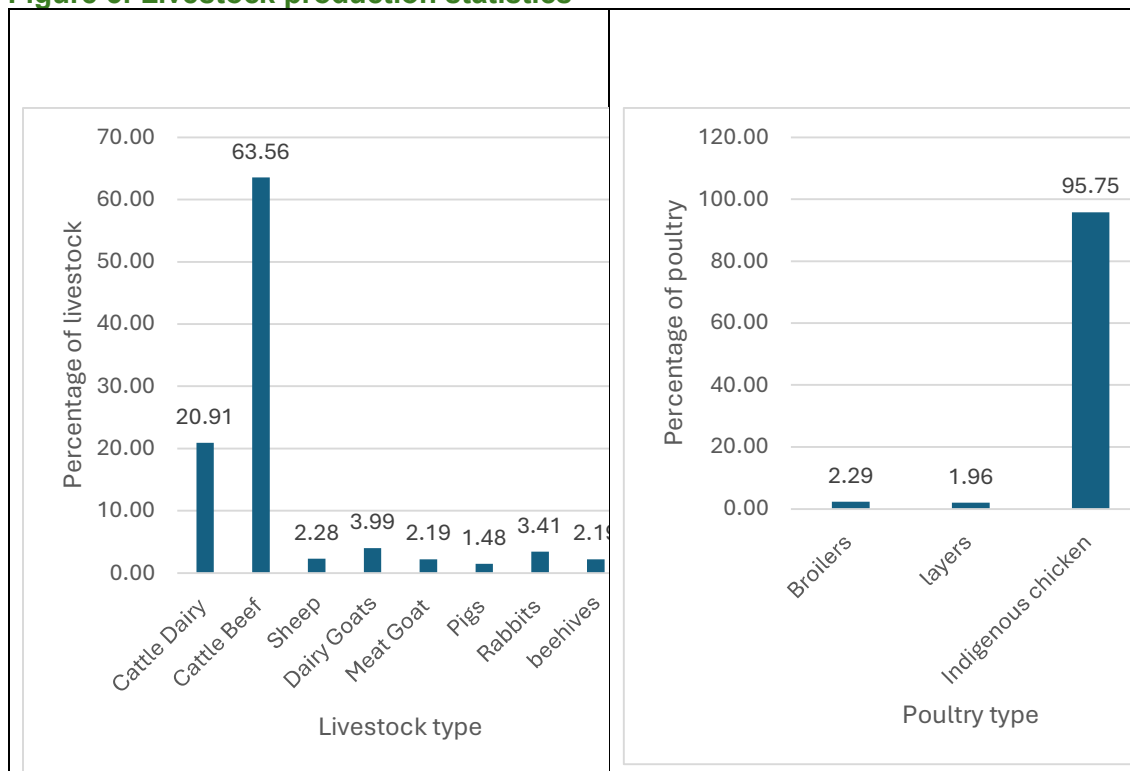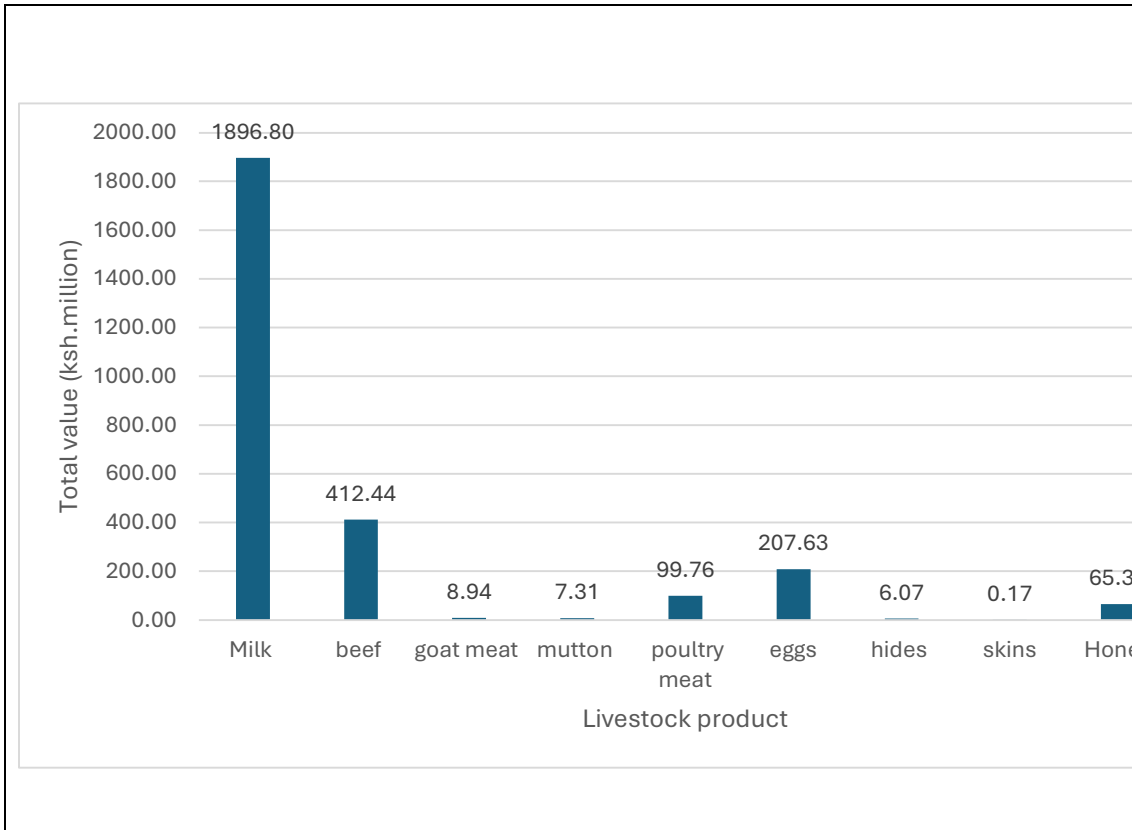
Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The average growth rate for industry sector is 10.00 per cent which is slightly below the national average of 10.58 per cent as shown in Figure 6.
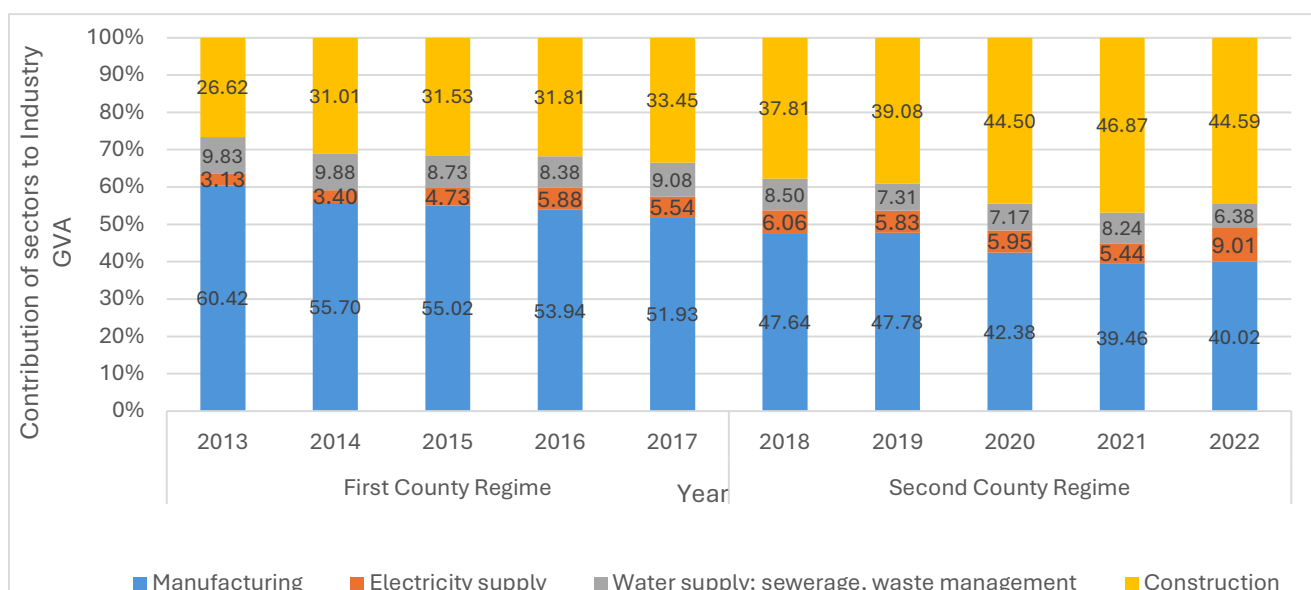
Figure 6: Vihiga County industry GVA growth rate

Data Source: KNBS 2023-Gross County Product

Manufacturing and construction dominate the industry sector as shown in the Figure 7.

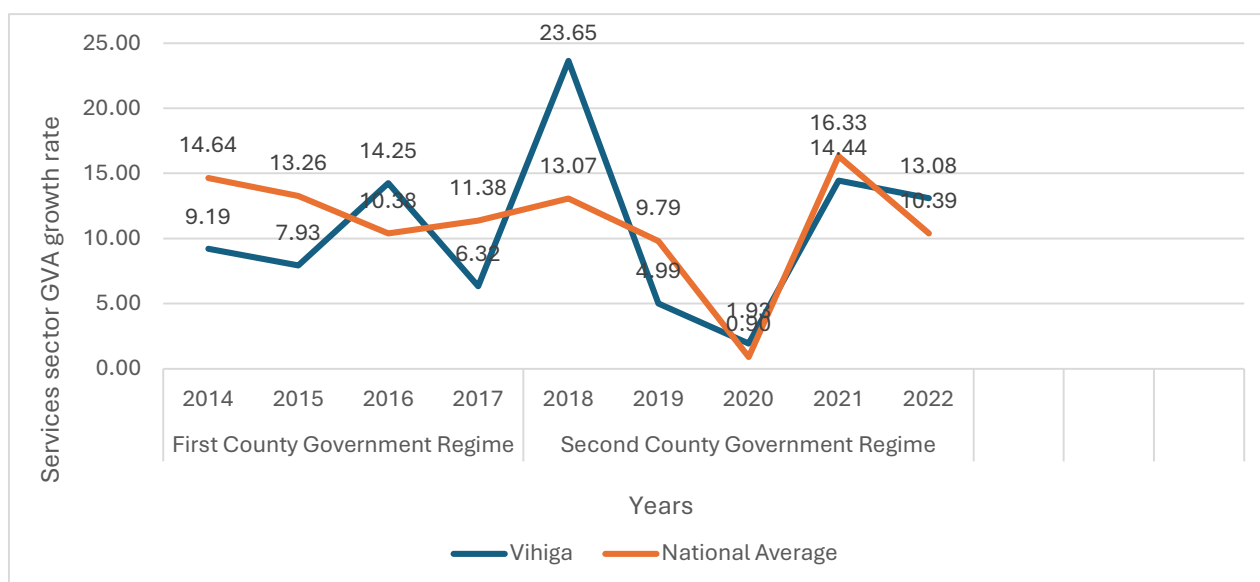## Figure 7: Contribution of industry sub-sectors to industry sector GVA

Data Source: KNBS 2023-Gross County Product

Services Sector

The average services sector growth rate is 8.65 per cent which is below the national average of 11.13 per cent as shown in Figure 8.

Figure 8: Vihiga County Services sector GVA growth rate

Data Source: KNBS 2023-Gross County Product

The public administration and defence sub-sector dominates the services sector with the highest contribution to services GVA at 19.39 per cent. The education sector is the second highest contributor to services GVA at 18.39 per cent. The real estate sub-sector is third at an average of 17.26 per cent as shown in Figure 9.

Figure 9: Contribution of sub-sectors to services sector GVA
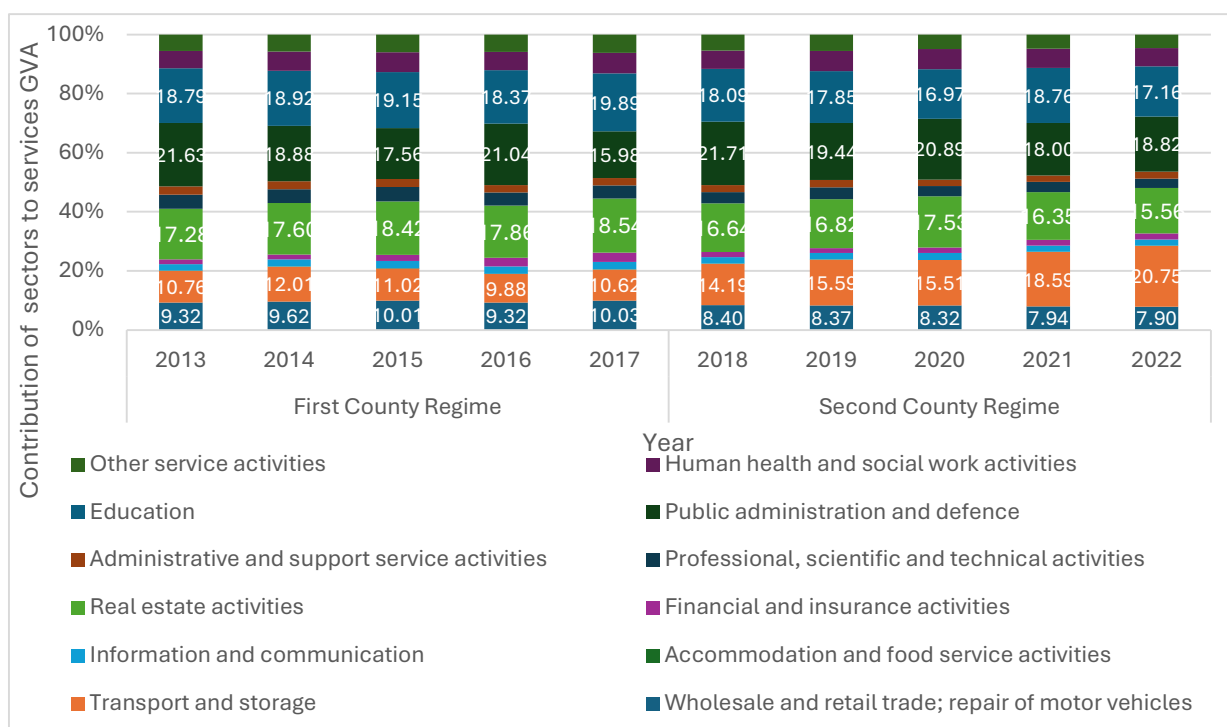
Data Source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force for Vihiga County

Vihiga County has a total of 315,276 working-age population about 53.44 per cent of the county population. Most of the working-age population is youthful (18-34 years) at 42.67 per cent as shown in Table 1.

Table 1: Distribution of the working-age population by age categories

Working age population	Male	Female	Total	Percentage of Total Working age population (%)
15-17	24,385	24,033	48,418	15.36
18 –24	33,959	34,622	68,581	21.75
25-34	29,589	36,344	65,933	20.91
35-64	61,628	70,716	132,344	41.98
Total	149,561	165,715	315,276	

Data Source: KNBS (2019), Kenya Population and Health Census - KPHC 2019

Most of the population in Vihiga sub-counties are persons in the working age categories. Vihiga has the highest percentage of working-age persons at 54.38 per cent as shown in Table 2.

Table 2: Sub-County distribution of working age population by age category.

Sub-County	Total population	Working age population categories				Working age population (15-64) as a percentage of the total sub-county population
		15-17	18 –24	25 –34	35-64	
Emuhaya	97,140	7,908 (15.70)	10,873 (21.58)	10,396 (20.64)	21,198 (42.08)	50,375 (51.86)
Vihiga	95,289	7,737 (14.93)	11,143 (21.50)	10,904 (21.04)	22,033 (42.52)	51,817 (54.38)
Sabatia	131,627	10,844 (15.27)	15,560 (21.91)	14,592 (20.55)	30,006 (42.26)	71,002 (53.94)
Luanda	106,690	8,377 (14.66)	12,106 (21.19)	12,609 (22.07)	24,032 (42.07)	57,124 (53.54)
Hamisi	159,238	13,552 (15.95)	18,898 (22.25)	17,427 (20.52)	35,065 (41.28)	84,942 (53.34)
Kakamega Forest	17	0 (0.00)	1 (6.25)	5 (31.25)	10 (62.50)	16 (94.12)

Data Source: KNBS (2019), Kenya Population and Health Census - KPHC 2019

Vihiga County socio-economic indicators that affect the quality of labour performed well as reported in Table 3. However, there is a need for interventions for food and child poverty in the county.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	88.50	78.41
Pre-primary net enrolment rate (2019)	77.76	67.51
Primary school net enrolment rate (2020)	94.10	77.72
Secondary school net enrolment rate (2020)	77.60	54.18
Average years of schooling (2014)	7.90	7.78
Percentage of children 12-23 months fully vaccinated (%)	94.40	74.97
Percentage of stunted children	16.60	19.75
Percentage of teenage pregnancy	7.70	15.79
Primary to secondary transition rates (2020)	88.80	86.13
Pupil-teacher ratio (primary school)	31.00	28.28
Food poverty head count (%)	42.60	33.63
Child poverty head count (%)	47.50	42.67

Source: KNBS (2022), Kenya Demographic and Health Surbey - KDHS 2022; KNBS (2019), Kenya Population and Health Census - KPHC 2019; Ministry of Education (2020; 2021 Basic Education Statistical Booklet; KNBS 2021-Kenya Poverty Report

In Vihiga County, the essential infrastructure and capital indicators that support production of county output such as the Rural Road Access Index, access to improved water, percentage of households using bank, performed higher than the national average as shown in Table 4. However, interventions are needed to increase access to electricity, internet, improved water, improve housing quality and increase financial inclusion.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average

Percentage of households with access to electricity (2019 Census	38.40	38.52
Distribution of Population using the Internet (2019 census)	14.10	18.69
Rural Access Index (2018)	87.38	63.72
Access to improved sanitation (2018)	43.00	59.04
Access to improved water (2018)	88.30	65.33
Financial inclusion level (2021)	79.00	81.01
The proportion of primary schools with Internet	27.05	27.65
Proportion of secondary schools with functional internet	29.00	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	31.93	51.71
Percentage of households using bank usage (overall)	43.60	38.18
Percentage of households using mobile money	76.50	78.58

Data Sources: KRB 2018, KPHC 2019, FinAccess 2021, KIHBS 2015/16

County Employment Statistics

The employment to population ratio at 65.58 per cent. Most of those working is the non-youth working population (35-64 years) at 37.88 per cent while the employment to population for the youth (18-34 years) is at about 26.74 per cent as shown in Table 5. The percentage of the employed by gender is 40.32 for male and 44.32 for female. The unemployment rate is at 4.68 per cent with unemployment being slightly higher for the youth (18-34 years) at 2.86 per cent. The percentage of persons 5–17 years old working is 2.75 per cent indicating that the county has low levels of child labour.

Table 5: Vihiga County employment statistics

Employment statistics	Youth	Non youth
Employment to population ratio (%)	26.74	37.88
Unemployment rate	2.86	1.75
Percentage of persons 5–17 years old working	2.75	-
Inactivity rate	25.11	3.91

Data Source: Data Source: KNBS (2019), Kenya Population and Health Census - KPHC 2019

Sectoral Employment

The agriculture sector is the highest employer in Vihiga County at 76.42 per cent followed by the industry sector at 18.81 per cent. The services sector is third at 17.23 per cent as shown in Figure 10.

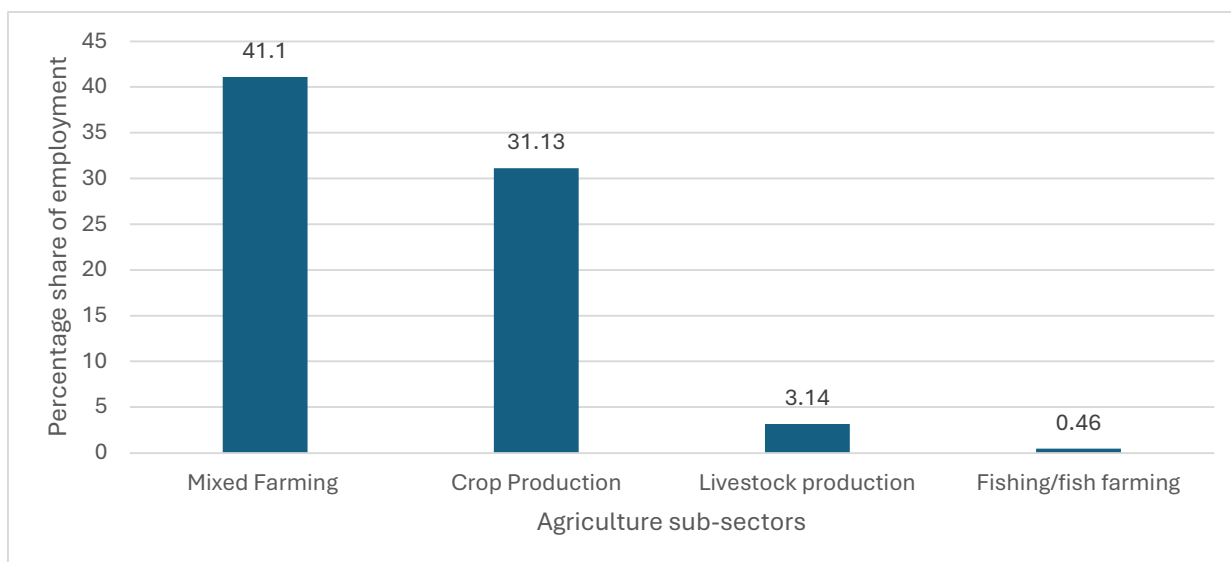**Figure 10: Percentage of persons employed in the broad sectors**
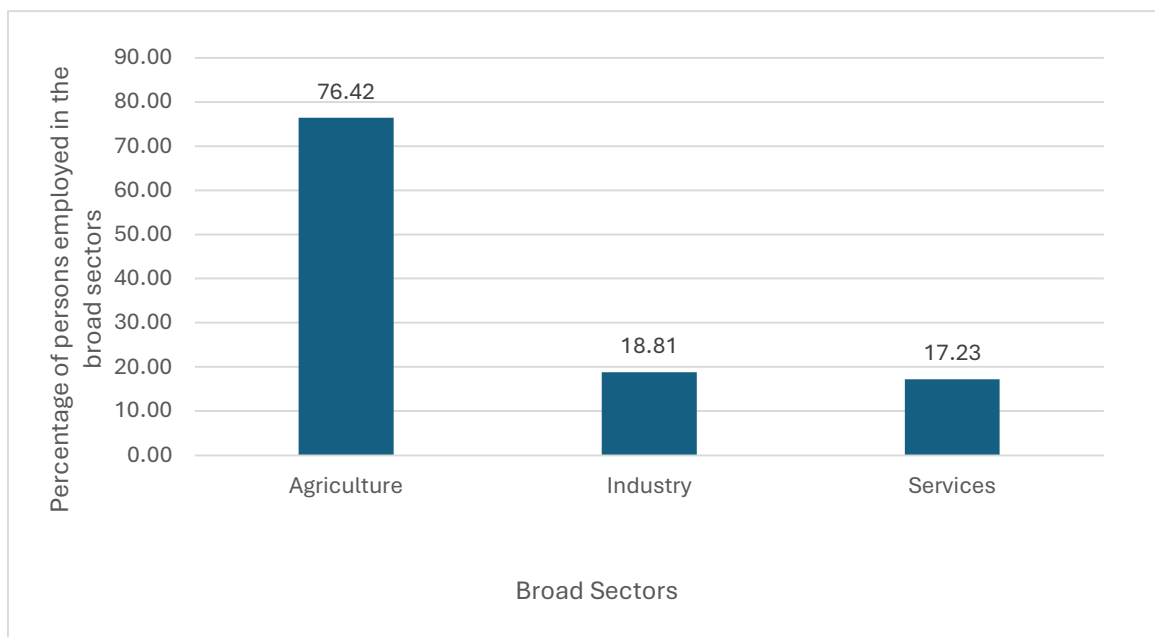
Data Source: KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector Employment

In agriculture sector, the majority are those practicing mixed farming as observed in Figure 11.

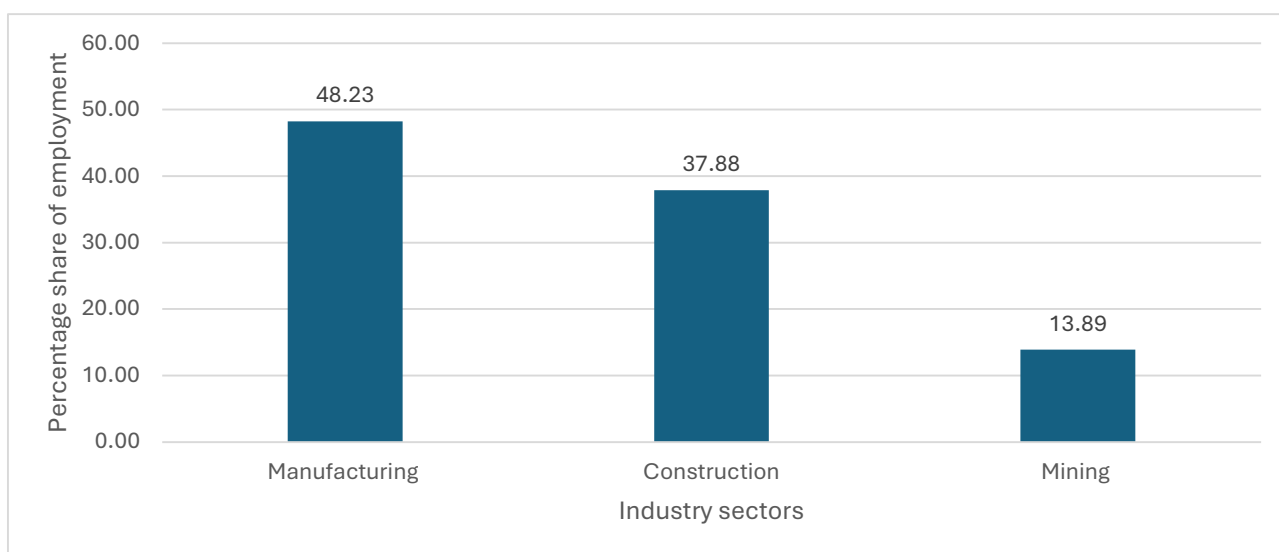**Figure 11: Percentage share of employment in agriculture sub-sectors**

Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector Employment

The majority of those working in the industry sector are in manufacturing as observed in Figure 12. Mining is in iron ores and quarrying of stones.

Figure 12: Percentage share of employment in the industry sectors

Data Source: KNBS 2021- Kenya Continuous Household Survey

A disaggregation of employment in manufacturing sector shows that the majority of those employed in the sector work in low-technology manufacturing sub-sectors such as textile and repairs industries as shown below in Figure 13.
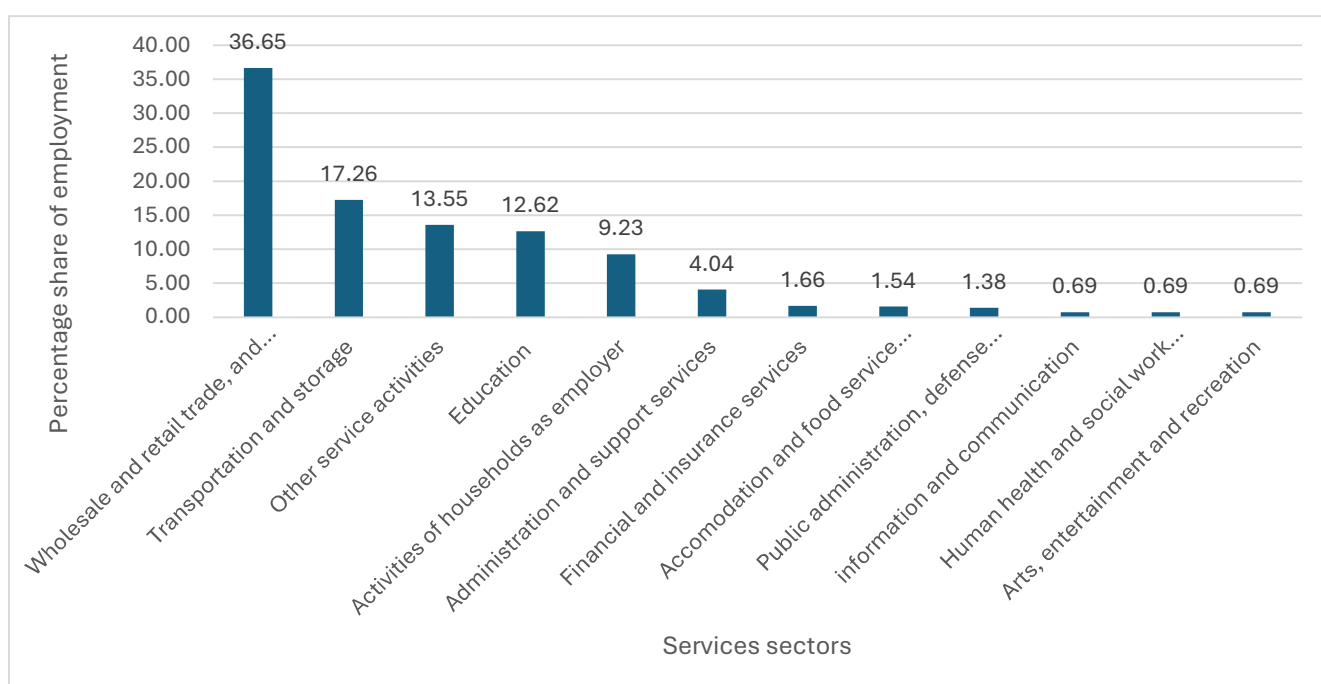
Figure 13: Percentage share of employment in manufacturing sub-sectors
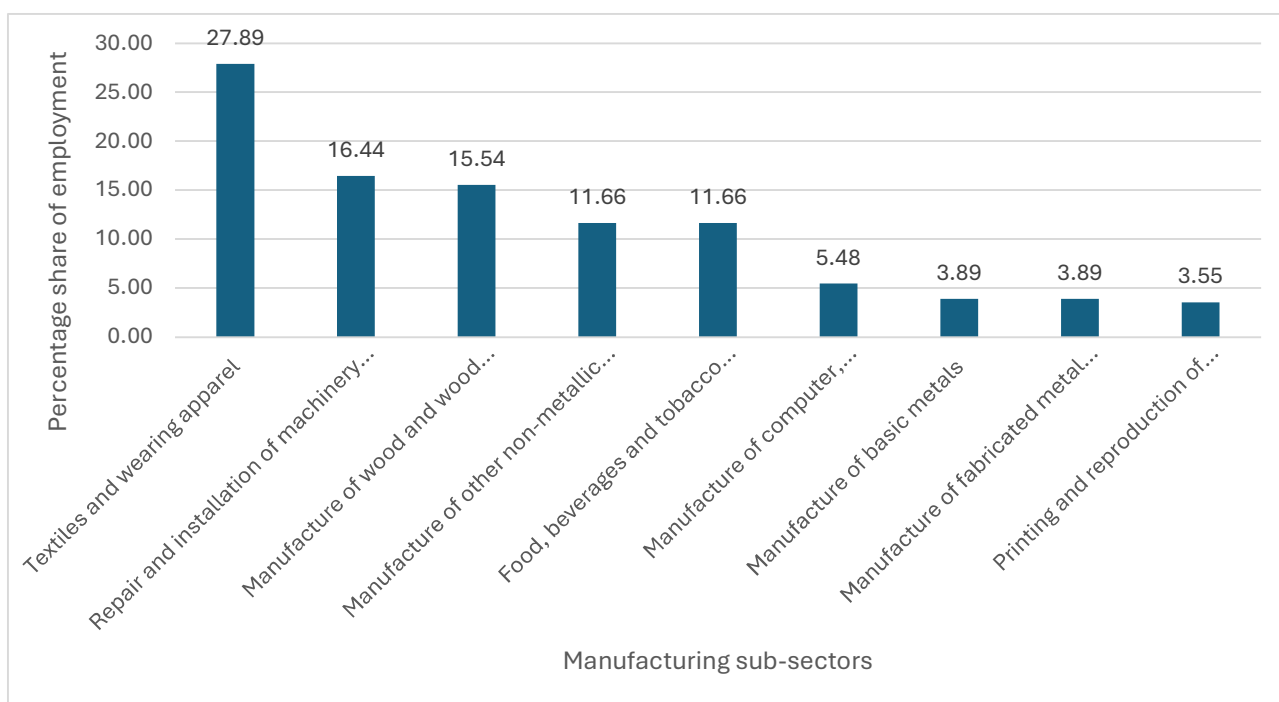
Data Source: KNBS 2021- Kenya Continuous Household Survey

The majority of those working in the services sector are in wholesale and retail trade as shown in Figure 14.
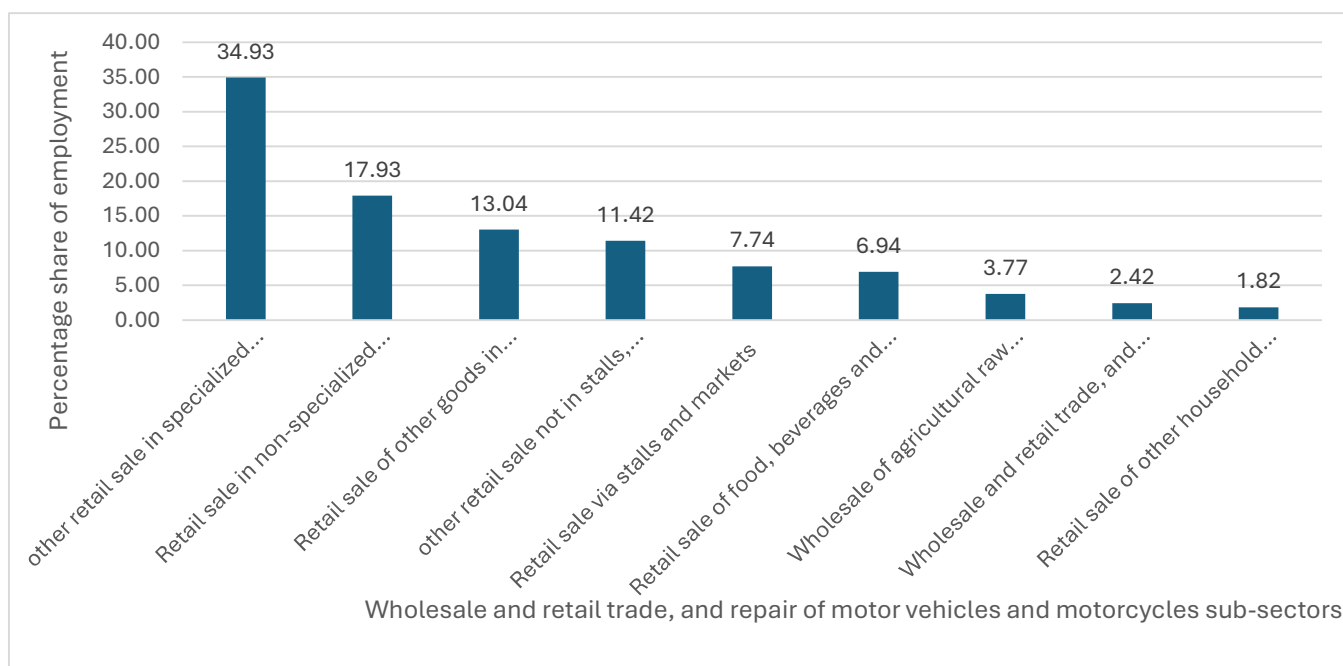
Figure 14: Percentage share of employment in the services sector

Data Source: KNBS 2021- Kenya Continuous Household Survey

In the wholesale and retail trade, the majority work in other retail in specialized stores as shown in Figure 15.

Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors

Data Source: KNBS 2021- Kenya Continuous Household Survey

In the transportation and storage sub-sector, the majority of those employed are in other passenger land transport as shown in Figure 16.

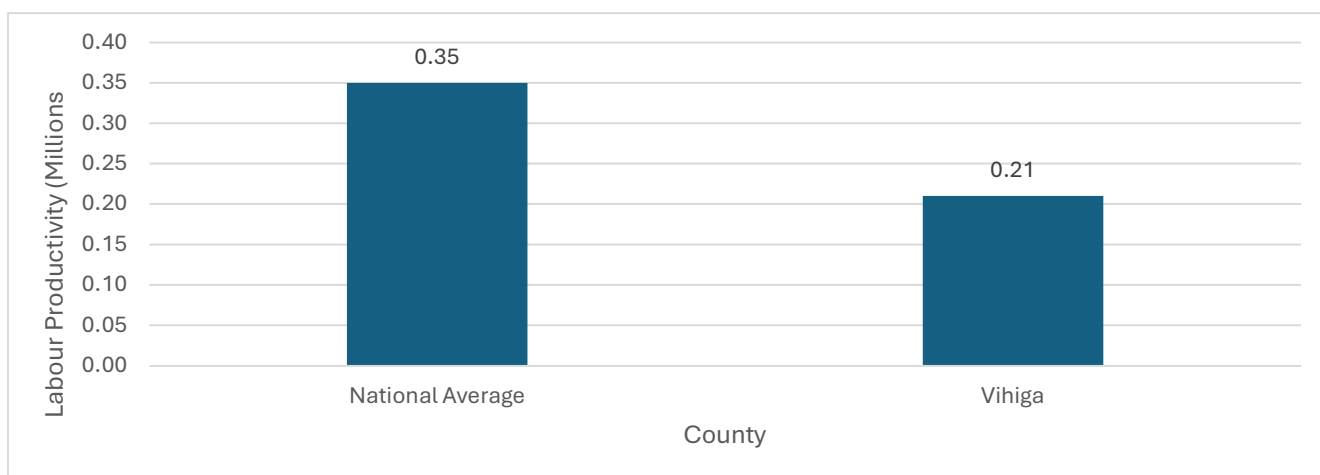**Figure 16: Percentage share of employment in the transport and storage sub-sectors**
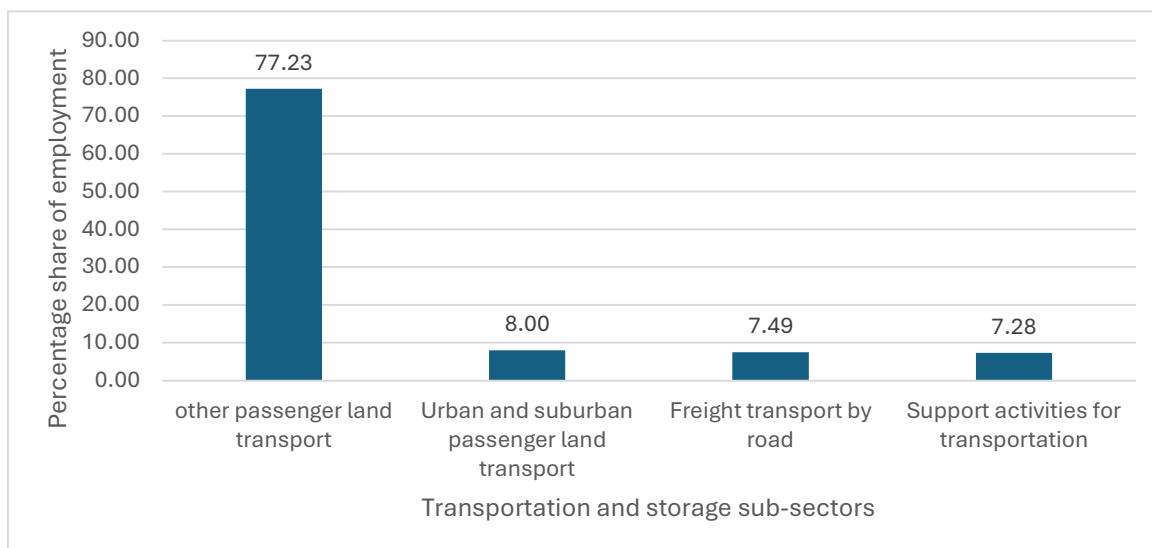
Data Source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity for Vihiga County is 0.21 per cent which is below the national average of 0.35 per cent as shown in Figure 17.
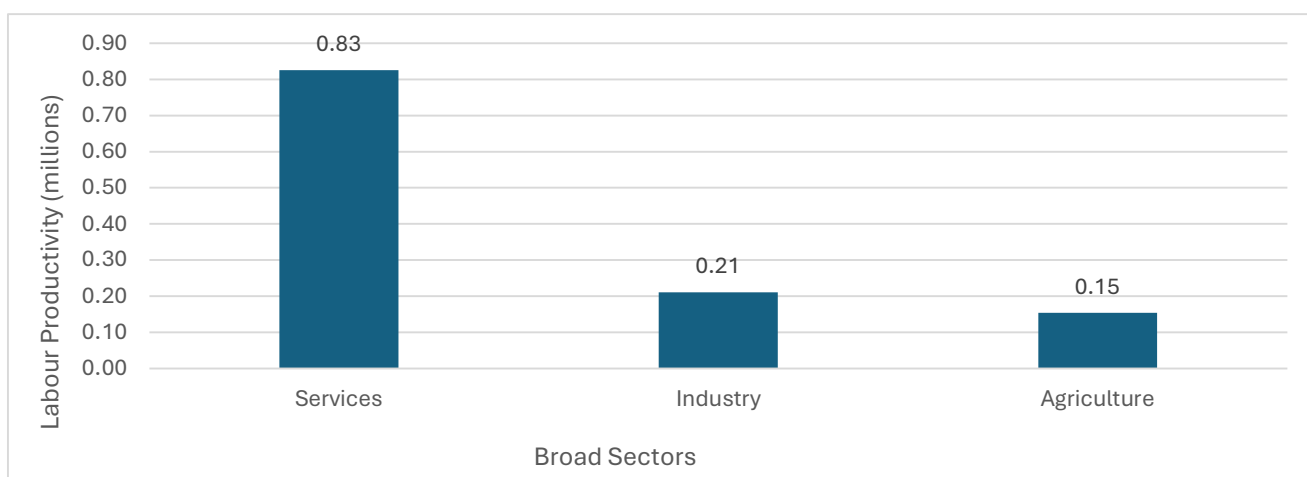
Figure 17: Labour productivity ratios (millions)

Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

The services sector has the highest productivity at 0.83 per cent, followed by the industry sector at 0.21 per cent, and thirdly the agriculture sector at 0.15 per cent as shown in Figure 18.
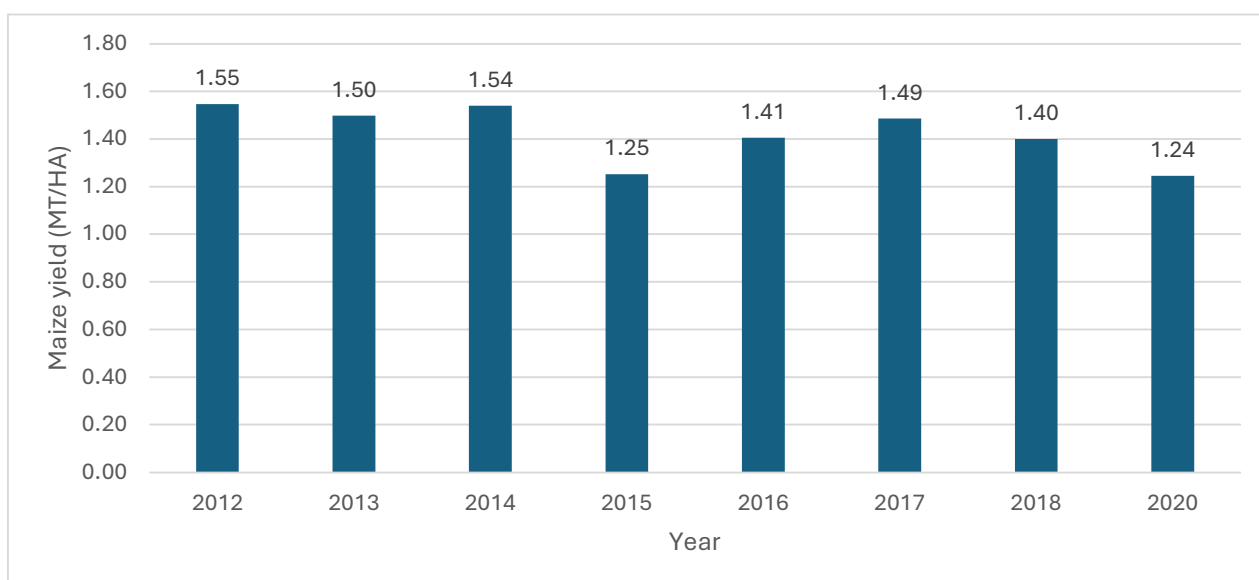
Figure 18: Labour productivity by sectors

Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Agriculture Productivity

In agriculture sector, maize productivity has been remained constant over the years with an average yield of 1.42 MT/HA. The highest decline was in 2015 which is attributable to the fall armyworm invasion that reduced maize yield as shown in Figure 19.
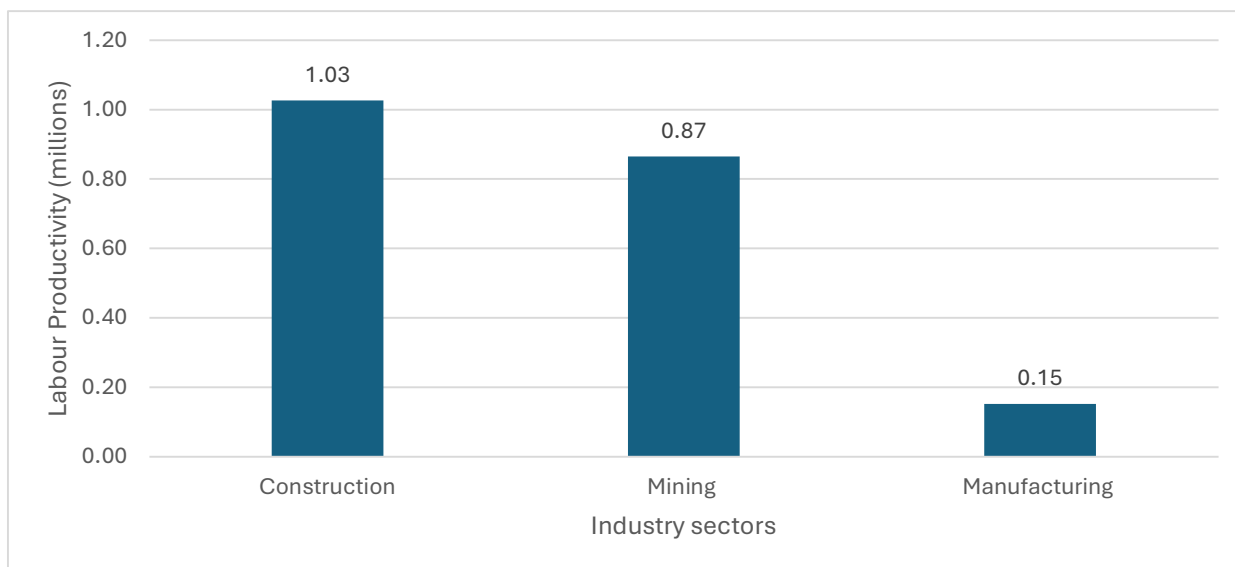
Figure 19: Maize yield (MT/HA)

Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector Labour Productivity

Construction and mining sectors had the highest labour productivity in the industry sector as shown in Figure 20.

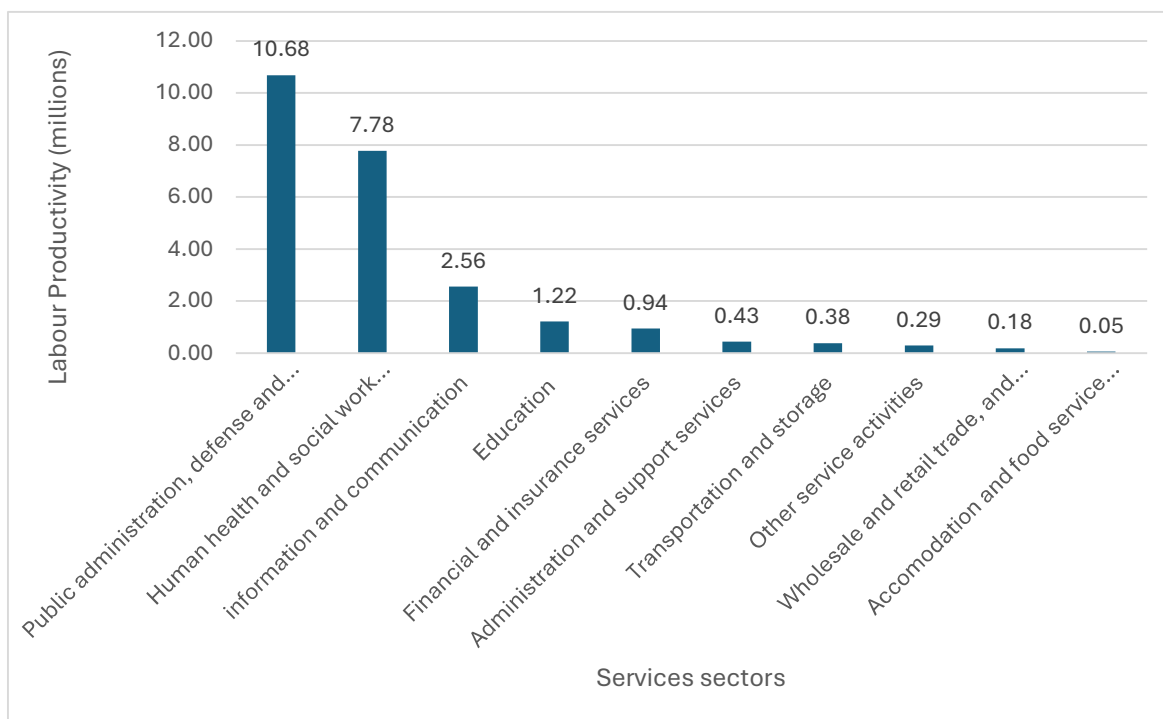**Figure 20: Labour productivity by industry sectors**

Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Servicess Sector Labour Productivity

Public administration and defence sub-sector had higher labour productivity when compared with other sectors within the services sector as shown in Figure 21.

Figure 21: Labour productivity in services sectors

Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Key Messages

(i) The share of agriculture sector has increased over time, but the services sector dominates the GVA. There is potential for crop farming with maize having increased its production before 2016 as the acreage increased. Animal production dominated by cattle farming and indigenous chicken. Manufacturing share is declining in the industry sector while transport and storage has a dominating share in the services sector.

(ii) The quality of labour is good with various indicators above the national average. Interventions however are required to reduce stunting and achieve 100 per cent transition.

(iii) Further, majority of the essential infrastructure and capital indicators that support the production of county output performed within the national averages. However, there is a need for interventions to improve access to electricity, improve sanitation, as well as internet connectivity.

(iv) While unemployment rate is 4.68 per cent, there is an elevated level of inactivity among the youth. The agriculture sector employs most of the workforce who are engaged especially in mixed farming. In the industry sector, manufacturing employs the highest with majority in textile and wearing apparel. In the services sector a considerable proportion is in the wholesale and retail sector.

(v) Labour productivity is lower than the national average. Services sector has the highest productivity while agriculture that employs the majority has the lowest productivity. In industrial sector, the highest productivity is in construction with manufacturing having the lowest which means the potential for textile and wearing apparel is yet to be exploited. In the services sector, the non-market services have the highest productivity. It means the wholesale and retail that dominate the services sector need support to make it contribute significantly to the output of the county.

Policy Recommendations

(i) While the quality of labour is improved, there is need to focus attention on nutritional programmes to address stunting and promote transition to secondary school to support in upgrading the skills engaged in the various sectors.

(ii) Create an enabling environment that supports the private sector activity, especially in services sector. This including improving access to electricity and internet connectivity. This will serve to support growth of MSMEs.

(iii) Exploit the potential for textile industry which employs the highest in manufacturing sector in the county. This is by strengthening its integration to the textile value chain and supporting production of raw materials.

(iv) Transformation of agriculture sector is a priority. This can be achieved through diversification of livestock products and integrating them to the leather and dairy farming. The county also has indigenous chicken and supporting the value chain will promote the small farmers. In addition, is to support maize production which has potential with increased cultivated land subsidized farm inputs to improve the yields. This is critical for food security.

Acknowledgement

The authors acknowledge the special contributions and guidance provided by Dr Rose Ngugi (Executive Director, KIPPRA) throughout the entire process of preparing the county brief. Appreciation also goes to Fridah Njiru for the assistance in compiling data for the brief.