



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Makueni County

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Introduction

Makueni County is a member of the South-Eastern Kenya *Economic Bloc* (SEKEB). The county is classified as a semi-arid county that experiences between 30-84 per cent aridity levels. The county land size is 8,009 km² and has nine sub-counties namely: Kathonzweni, Kibwezi, Kilungu, Makindu, Makueni, Mbooni East, Mbooni West, Mukaa, and Nzau.

Key Highlights

The productivity of Makueni County is characterized by the following:

- (i) The service sector dominates the Gross Value Added (GVA) while the industry sector is the least and has been declining. The share of manufacturing has been declining while that of construction expanded during the period under review. The public administration and defence sub-sector – a non-market service – dominates the services sector.
- (ii) Quality of labour requires interventions to reduce stunting, teenage pregnancy, and child poverty.
- (iii) Essential infrastructure requires interventions to increase access to electricity, internet connectivity, rural, and improved water.
- (iv) Agriculture is the highest employer, with a majority in mixed farming. In manufacturing, the majority are employed in the textiles and repair and installation

of machinery and equipment industries. In wholesale and retail trade, the majority are working in the retail of food, beverages, and tobacco products.

- (v) Labour productivity is highest in the industry sector and lowest in the agriculture sector. The mining sub-sector has the highest labour productivity in the industry sector, while the real estate sub-sector has the highest in the service sector.

To enhance productivity, there is a need to:

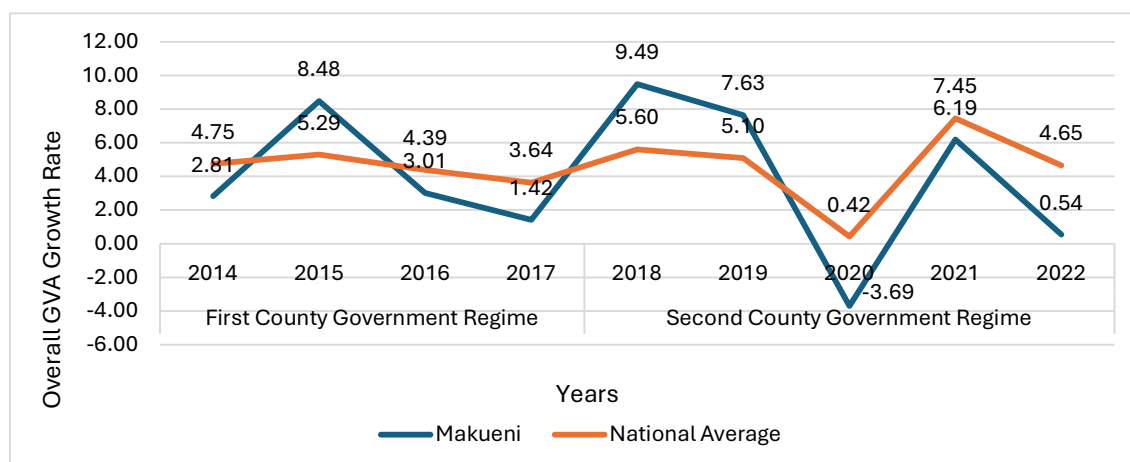
- (i) Build climate resilience in agriculture by encouraging drought-resistant and fast-maturing crops, increasing the uptake of crop insurance, using information from the early warning systems to inform crop production, and promote livestock value chains.
- (ii) Improve the quality of labour by implementing nutrition-sensitive programmes, creating awareness, and facilitating teenage mothers to go back to school.
- (iii) Invest in essential infrastructure to support private sector growth including an increase in access to electricity, internet connectivity, and access to improved water.
- (iv) Exploit the potential in mining to grow the industrial sector.

Makueni County Economic Performance

Makueni County contributes on average 1.1 per cent of the National Gross Value Added with an average GVA size of Ksh 82,1217 million. The GVA per capita for Makueni County is Ksh 164,922.2199 with an average population growth rate of 1.4 per cent and overall poverty levels at 39.70 per cent.

Makueni County has shown steady growth in GVA with an average growth rate of 3.99 per cent from 2013-2022, which is below the national average growth of 4.37 per cent as shown in Figure 1. The highest growth rate was experienced in 2018 while the lowest growth rate was experienced in 2021.

Figure 1: Makueni County GVA growth rate

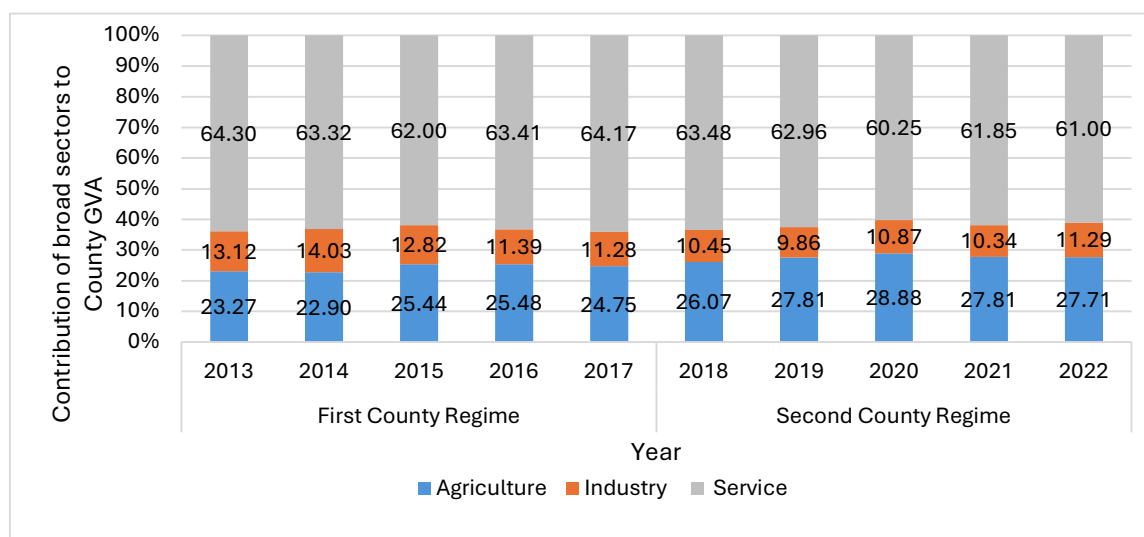


Data source: GCP 2023

Sectoral Analysis of Makueni County GVA

The service sector is dominant in Makueni County with an average contribution to GVA of 62.67 per cent. The agriculture sector is second, contributing an average of 26.01 per cent to the GVA while the industry sector contributes about 11.55 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Makueni County GVA

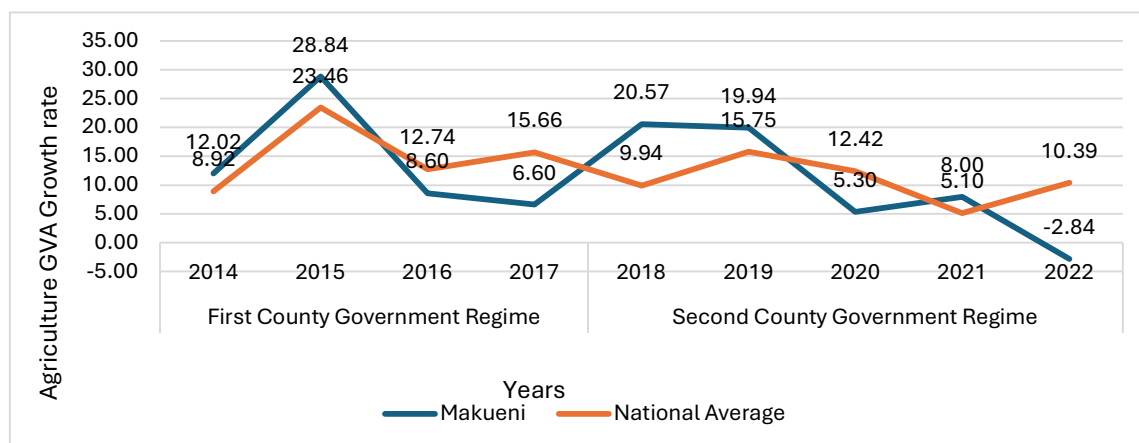


Data source: GCP 2023

Agriculture Sector

The average agriculture GVA growth rate (2013-2022) for Makueni County is 11.89 per cent, below the national average of 12.71 per cent as shown in Figure 3.

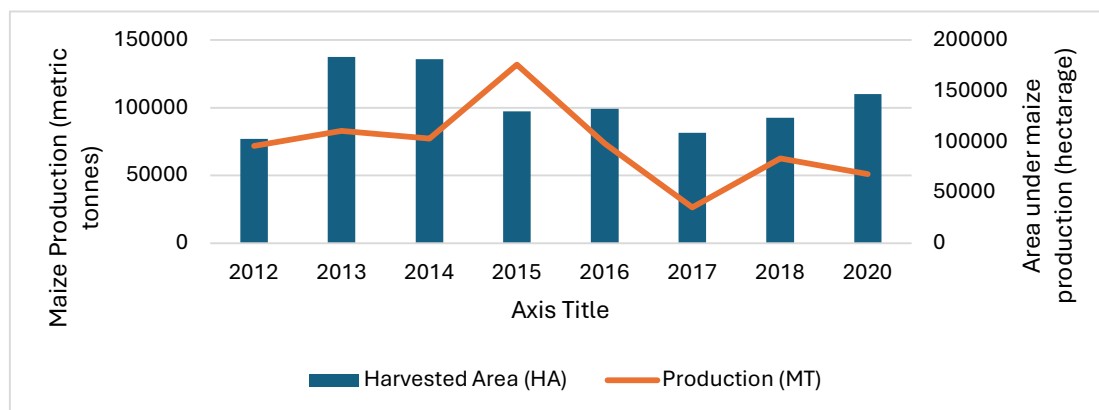
Figure 3: Makueni County agriculture GVA growth rate



Data source: GCP 2023

Maize, the main staple food in the country is also the main food crop produced in Makueni County. The area under maize production has been relatively constant except for 2013 and 2014, which were significantly higher. Maize production (metric tonnes) has been fluctuating, showing increments from 2012 to 2015 when it was the highest to sharply declining between 2016 to 2017, after which it recovered but remained lower than 2012 levels (Figure 4).

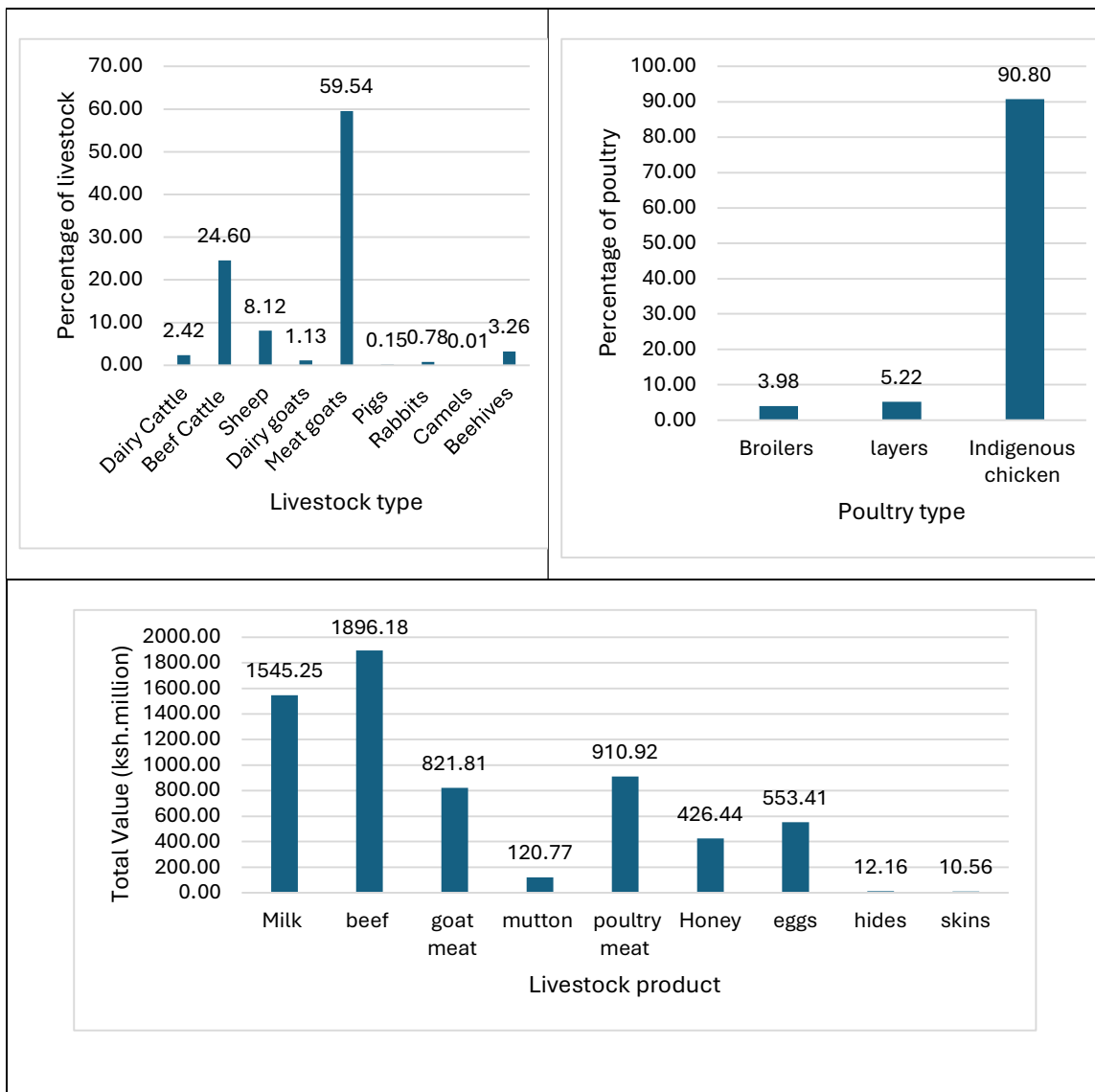
Figure 4: Maize Production



Data source: NIPFN

Livestock production in Makueni County is on a smaller scale when compared to crop production. The most common livestock kept are meat goats and beef cattle. Poultry farming is comparatively high, with Indigenous chicken being the most popular poultry type. Beef, milk, and poultry meat have the highest economic value in the county (Figure 5). Eggs also have significant value indicating a potential in the poultry value chain. Although beehives were comparatively fewer, honey had a significant economic value, which is indicative of potential in honey production.

Figure 5: Livestock production statistics

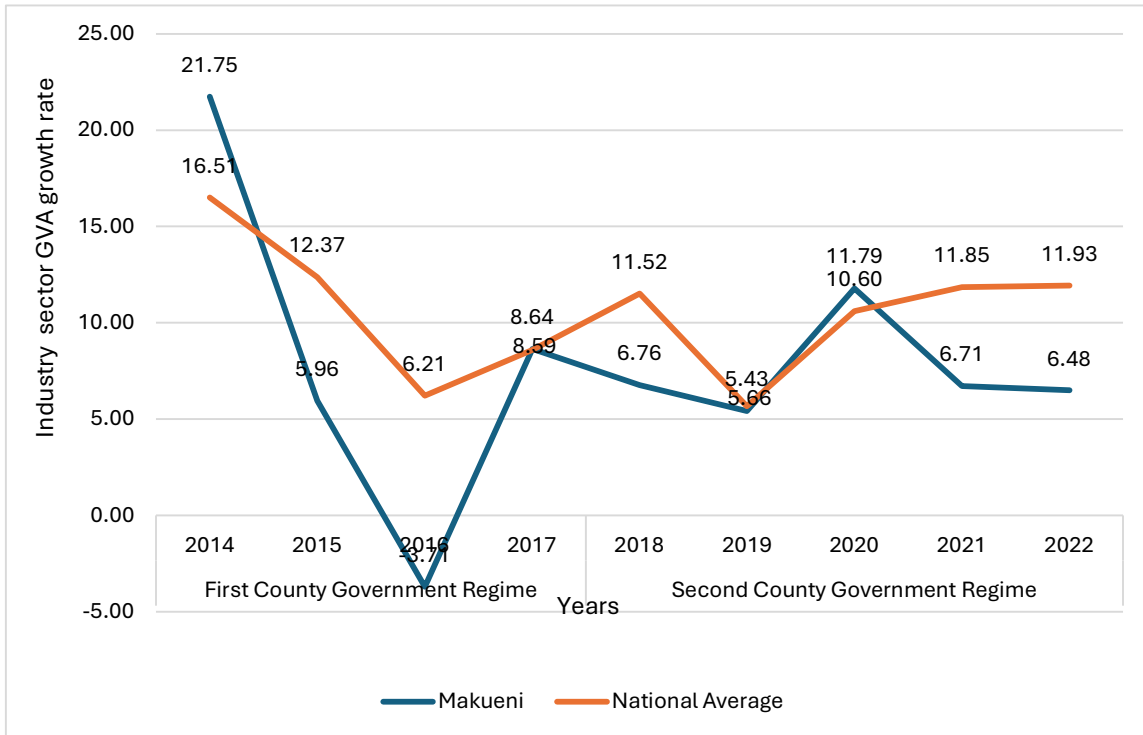


Data source: NIPFN

Industry Sector

The average industry sector growth rate for Makueni County is 7.76 per cent, below the national average of 10.58 per cent as shown in Figure 6.

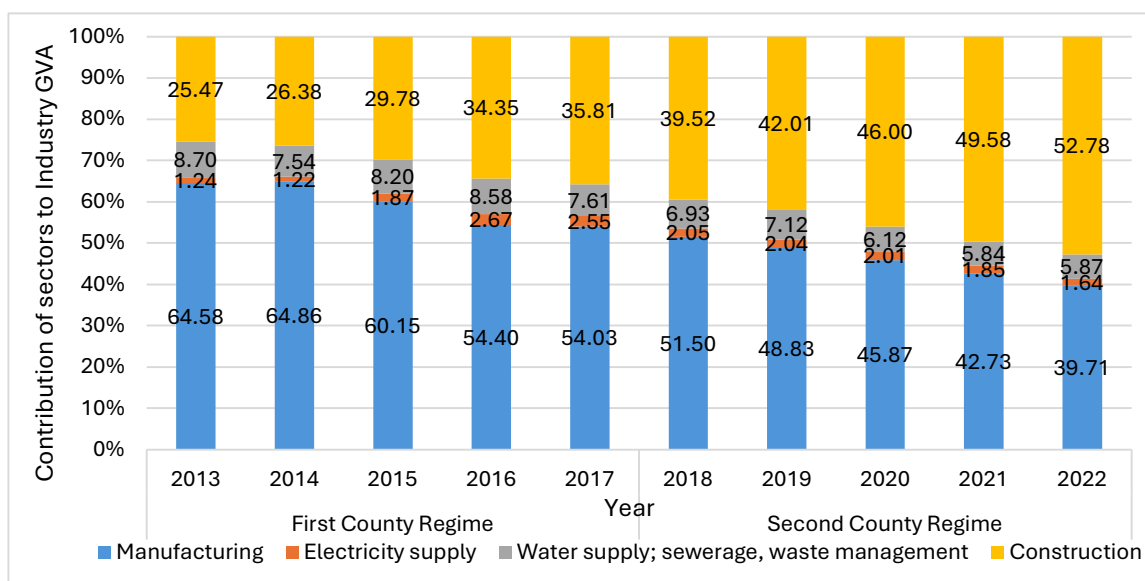
Figure 6: Makueni County industry GVA growth rate



Data source: GCP 2023

Manufacturing and construction are other important sectors in Makueni County as they dominate the industry sector. The share of manufacturing has been declining over the years while that of construction expanded and dominated (Figure 7).

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

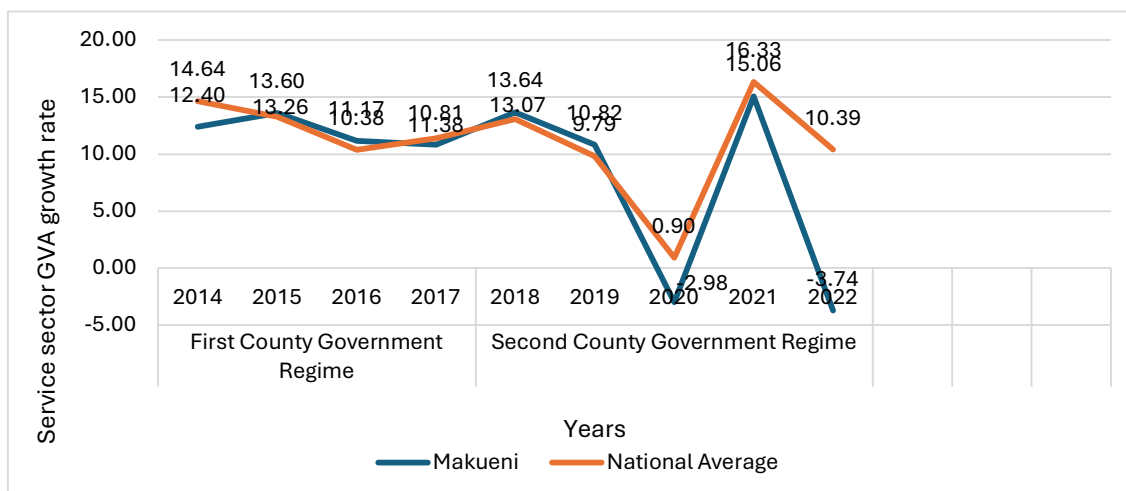


Data source: GCP 2023

Services sector

The average services sector growth rate is 8.94 per cent, below the national average of 11.13 per cent as shown in Figure 8.

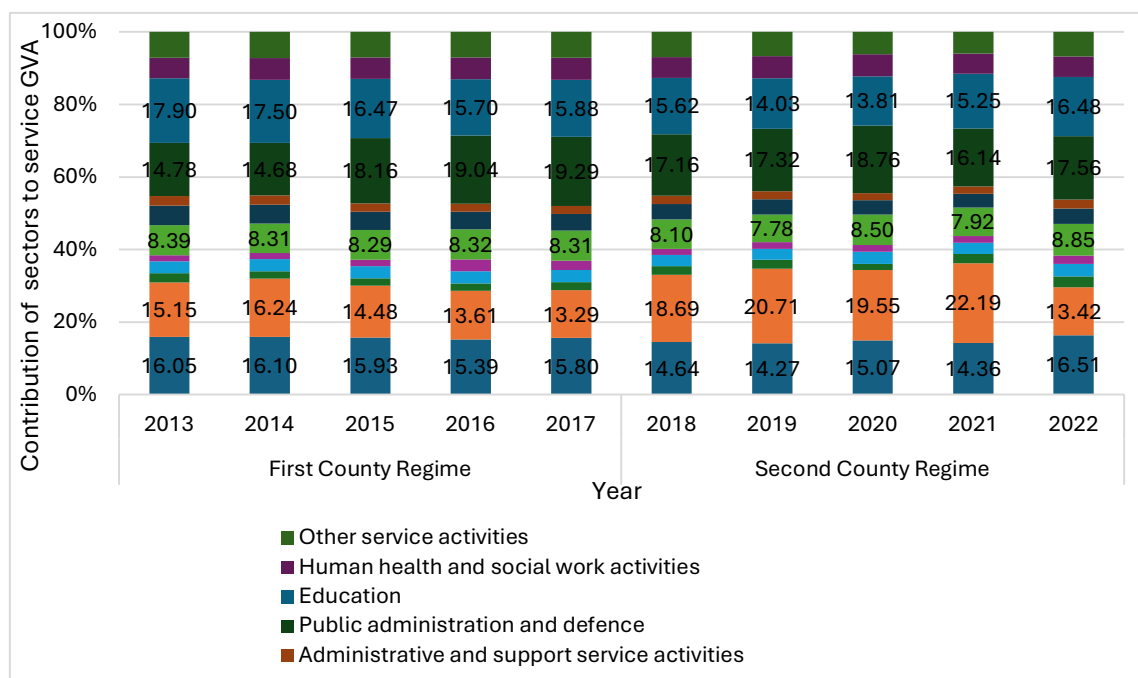
Figure 8: Makueni County services sector GVA growth rate



Data source: GCP 2023

The public administration and defence sub-sector, a non-market service dominates the services sector with the highest contribution to service GVA at 17.29 per cent. The transport and storage sector is the second highest contributor to services GVA at 17.47 per cent. The education sub-sector is third at an average of 15.86 per cent as shown in Figure 9.

Figure 9: Contribution of services sub-sectors to the overall sector GVA



Data source: GCP 2023

Quantity and Quality of Labour Force for Makueni County

Makueni County has a total working-age population of 576,714, which is about 58.39 per cent of the total county population. The majority of the working-age population is youthful (18-34 years) at 44.01 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	41,521	39,464	80,985	14.04
18 –24	63,669	57,980	121,649	21.09
25-34	64,518	67,625	132,143	22.91
35-64	117,843	124,094	241,937	41.95
Total	287,551	289,163	576,714	

Data source: KPHC 2019

The majority of the population in Makueni sub-counties are persons in the working age categories. Makueni sub-county has the highest percentage of persons of working age at 61.32 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	
Kathonzweni	79,777	7,236 (15.72)	9,871 (21.45)	9,747 (21.18)	19,162 (41.64)	46,016 (57.68)
Kibwezi	196,994	17,137 (15.19)	23,850 (21.14)	26,145 (23.17)	45,688 (40.50)	112,820 (57.27)
Kilungu	60,951	5,111	7,193	6,856	14,518	33,678

		(15.18)	(21.36)	(20.36)	(43.11)	(55.25)
Makindu	84,946	6,879 (13.64)	10,817 (21.45)	12,438 (24.66)	20,295 (40.24)	50,429 (59.37)
Makueni	130,373	9,318 (11.59)	17,577 (21.86)	20,188 (25.10)	33,340 (41.46)	80,423 (61.69)
Mbooni East	97,753	8,279 (14.57)	11,620 (20.46)	12,108 (21.32)	24,797 (43.65)	56,804 (58.11)
Mbooni West	102,593	8,607 (14.85)	11,883 (20.50)	12,296 (21.21)	25,183 (43.44)	57,969 (56.50)
Mukaa	107,549	7,928 (12.36)	13,048 (20.35)	15,228 (23.75)	27,918 (43.54)	64,122 (59.62)
Nzau	126,697	10,490 (14.09)	15,790 (21.21)	17,137 (23.02)	31,036 (41.69)	74,453 (58.76)

Data source: KPHC 2019

Makueni County has high socioeconomic indicators that affect the quality of labour (Table 3). However, interventions are required to reduce stunting, teenage pregnancies, and child poverty.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	82.30	78.41
Pre-primary net enrolment rate (2019)	75.96	67.51
Primary school net enrolment rate (2020)	97.10	77.72
Secondary school net enrolment rate (2020)	81.20	54.18

Average years of schooling (2014)	7.90	7.78
Percentage of children (12-23 months) fully vaccinated (%)	89.70	74.97
Percentage of stunted children	19.80	19.75
Percentage of teenage pregnancy	11.10	15.79
Primary to secondary transition rates (2020)	90.90	86.13
Pupil-teacher ratio (primary school)	27.00	28.28
Food poverty headcount (%)	32.00	33.63
Child poverty headcount (%)	39.00	42.67

Data source: KDHS 2022, KPHC 2019, Basic Education Statistical Booklet, 2020, 2021 KNBS Kenya Poverty Report

Majority of the essential infrastructure that supports the growth of Makueni County's GVA is lower than the national average (Table 4). Interventions are needed to increase electricity and internet connectivity and access to improved water.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census)	20.40	38.52
Distribution of population using the internet (2019 census)	16.10	18.69
Rural Access Index (2018)	73.15	63.72
Access to improved sanitation (2018)	88.00	59.04
Access to improved water (2018)	53.10	65.33

Financial inclusion level (2021)	87.50	81.01
The proportion of primary schools with internet	23.60	27.65
Proportion of secondary schools with functional internet	29.00	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	87.26	51.71
Percentage of households using bank usage (overall)	35.20	38.18
Percentage of households using mobile money)	84.90	78.58

Data sources: KRB 2018, KPHC 2019, FinAccess 2021, KIHBS 2015/16, Basic Education Statistical Booklet, 2020

County Employment Statistics

The employment-to-population ratio is at 67.57 per cent. The majority of those working is the non-youth working population (35-64 years) at 37.77 per cent while that of the youthful working age population (18- 34 years) is at 29.02 per cent (Table 5). The percentage of the employed by gender is 44.02 for males and 48.35 for females. The unemployment rate is at 5.32 per cent with unemployment being slightly higher for the youth (18-34 years) at 3.28 per cent and those between 35-64 years at 2.04 per cent. The percentage of persons between 5-17 years working is 2.17 per cent indicating that the county has low levels of child labour. The inactivity rates are higher for the youth category (15-24 years) at 22.58 per cent, which is expected as they are pursuing schooling while low for the persons of prime age (25-64 years) at 2.83 per cent.

Table 5: Makueni County employment statistics

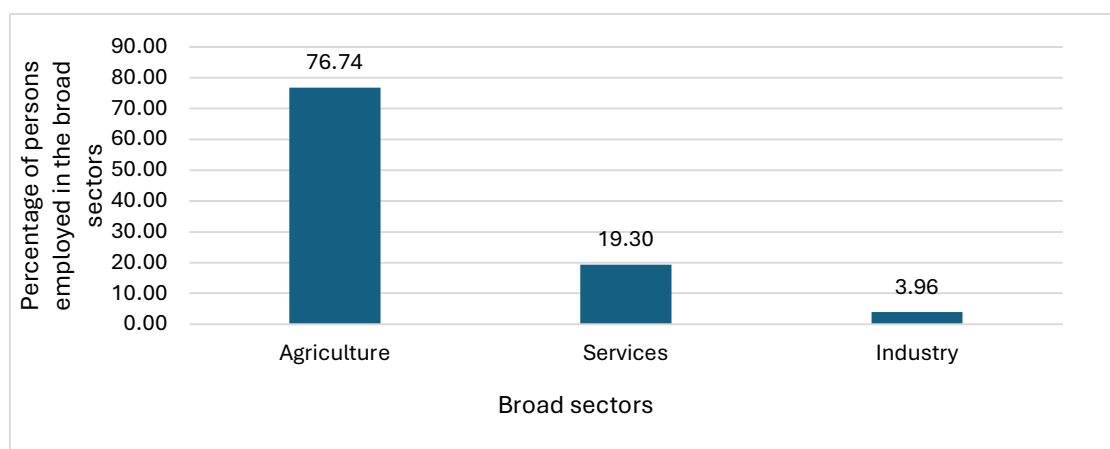
Employment statistics	Youth	Non-youth
Employment to population ratio (%)	29.02	37.77
Unemployment rate	3.28	2.04
Percentage of persons between 5-17 years old working	2.17	-
Inactivity rate	22.58	2.83

Data source: KPHC 2019

Sectoral Employment

The agriculture sector is the highest employer in Makueni County at 76.74 per cent followed by the services sector at 19.30 per cent. The industry sector is third at 3.96 per cent.

Figure 10: Percentage of persons employed in the broad sectors

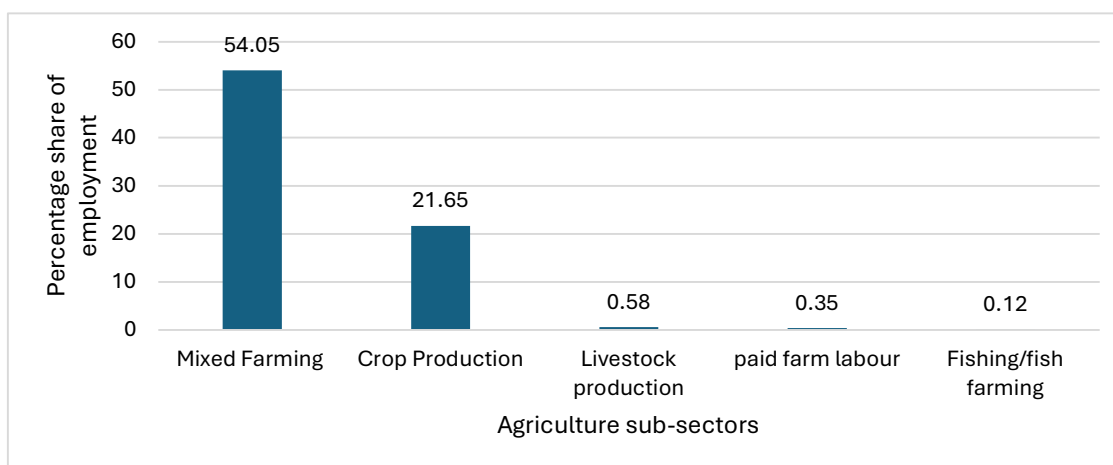


Data source: KCHS 2021

Agriculture Sector

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

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

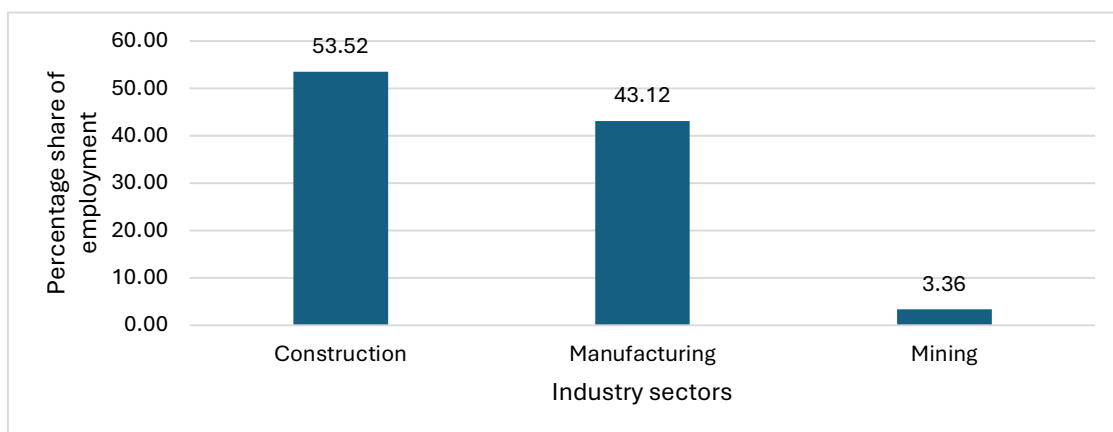


Data source: KCHS 2021

Industry Sector

The majority of those working in the industry sectors are in the construction sub-sector (Figure 12) with the construction of buildings being dominant.

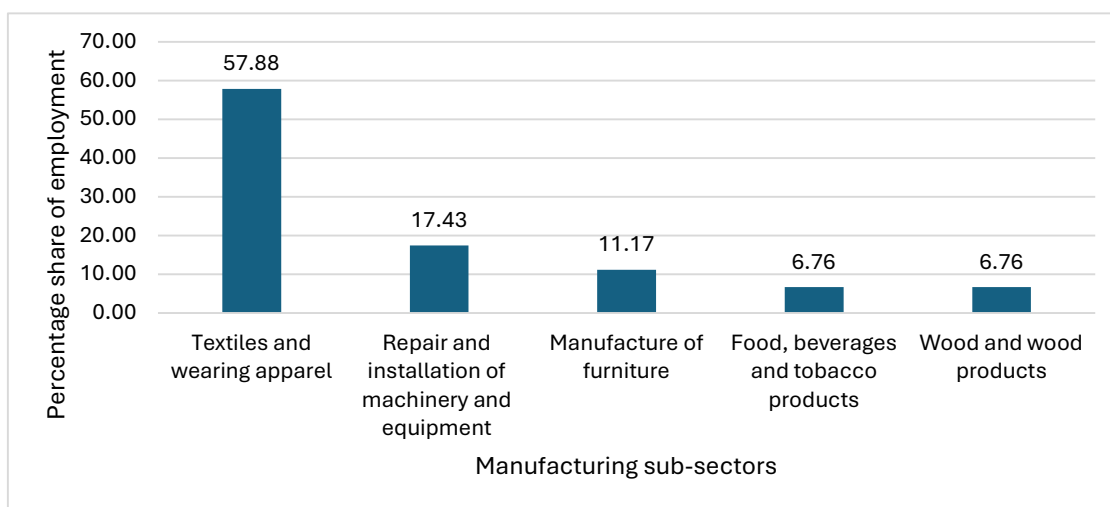
Figure 12: Percentage share of employment in the industry sector



Data source: KCHS 2021

A disaggregation of employment in manufacturing shows that the majority of those employed in the sector work in low-technology textiles and repair and installation of machinery and equipment industries as shown in Figure 13.

Figure 13 : Percentage share of employment in manufacturing sub-sectors

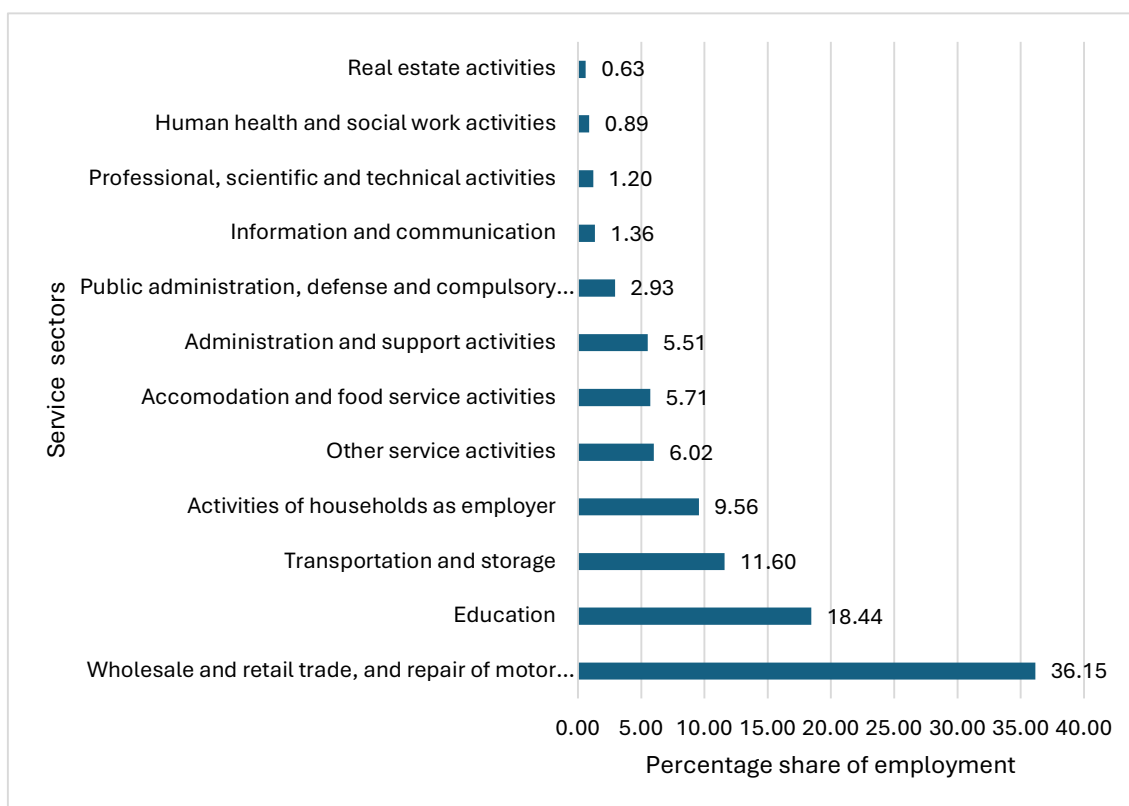


Data source: KCHS 2021

Services Sector

The majority of those working in the services sector are in wholesale and retail trade, and repair of motor vehicles and motorcycles as shown in Figure 14.

Figure 14 : Percentage share of employment in the service sector



Data source: KCHS 2021

In the wholesale and retail trade, and repair of motor vehicles and motorcycles sub-sectors, the majority work in the retail sale of food, beverages, and tobacco products as shown in Figure 15.

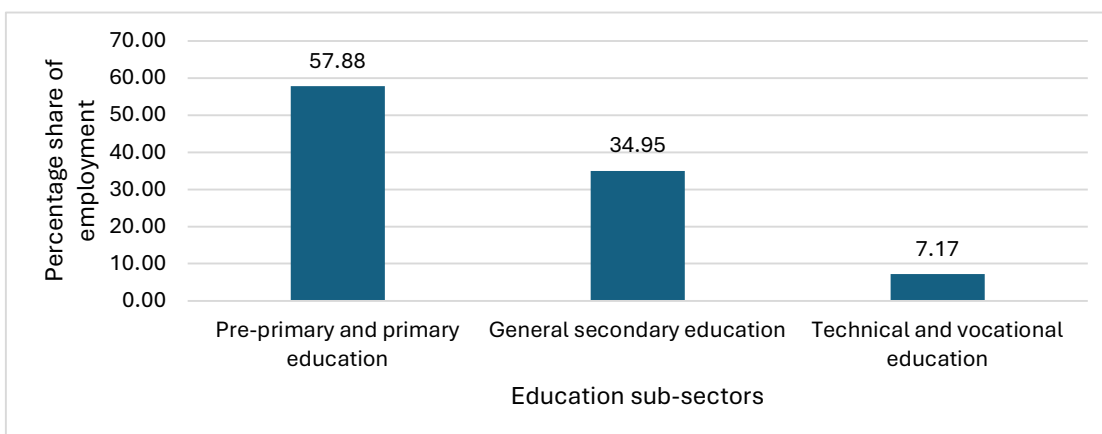
Figure 15: Percentage of persons employed in the wholesale and retail trade, and repair of motor vehicle sub-sectors



Data source: KCHS 2021

In the education *sub*-sector, the majority of those employed are in pre-primary and primary education as shown in Figure 16.

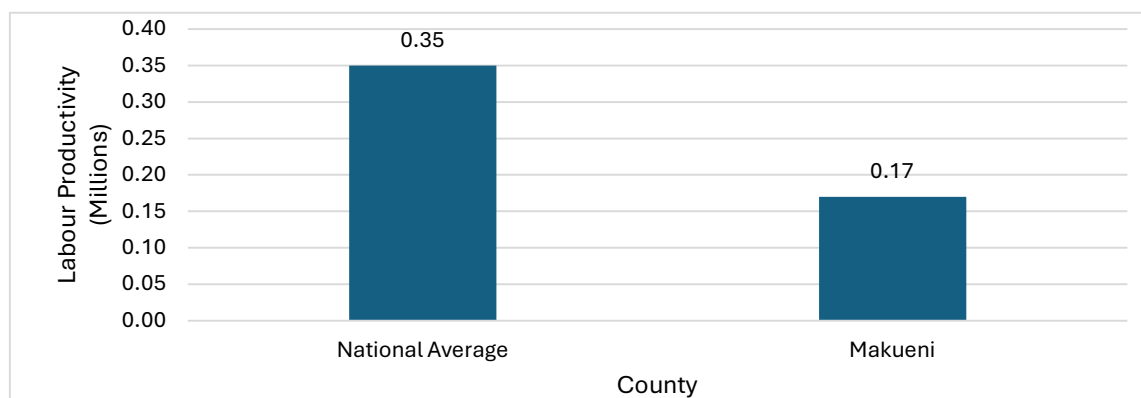
Figure 16 : Percentage share of employment in education sub-sector



Labour Productivity

Labour productivity¹ for Makueni County is lower than the national average labour (Figure 17).

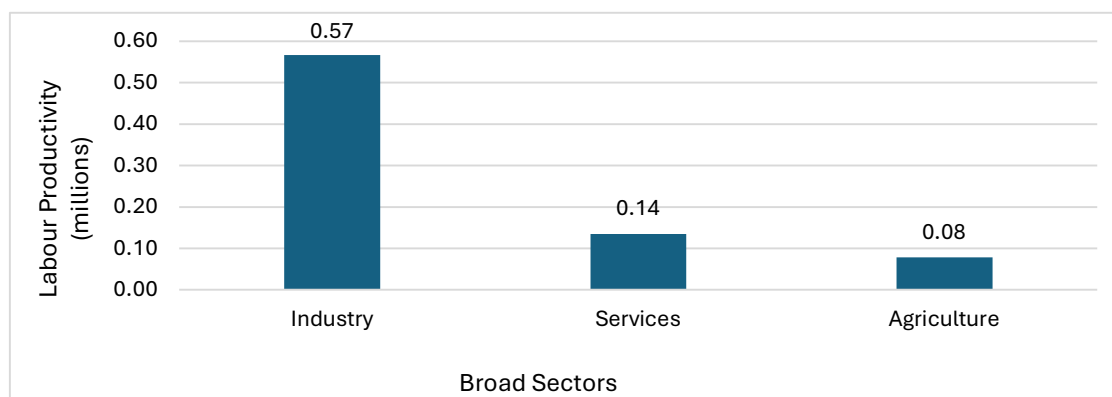
Figure 17: Labour productivity ratios (millions)



Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

The industry sector had the highest productivity, followed by the services sector while the agriculture sector had the least labour productivity (Figure 18).

Figure 18: Labour productivity by sectors



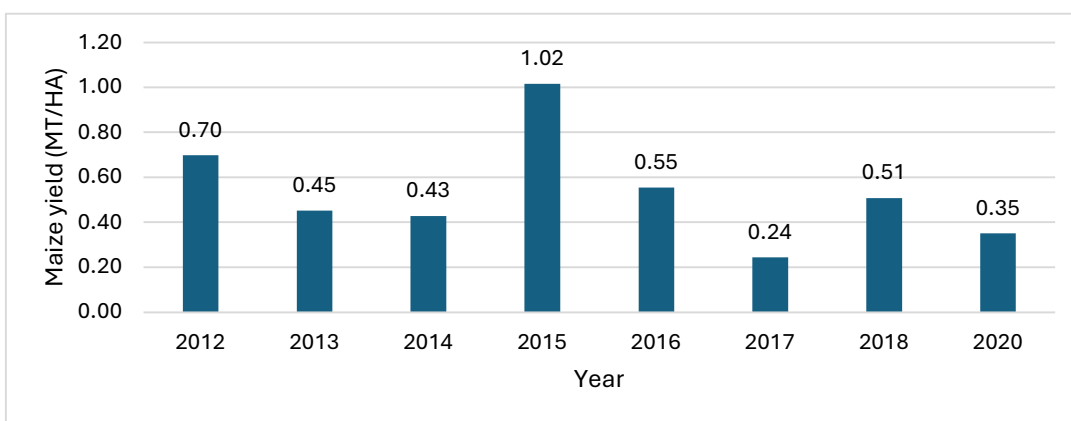
Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

¹ The measure used is the apparent labour productivity measured as gross value added per person employed.

Agriculture Sector

Maize productivity as measured by maize yield is low in Makueni County at an average yield of 0.53 MT/HA for the eight (8) years under review. Additionally, the yields have been fluctuating over the years with the highest being in 2015 and the lowest in 2017. Aridity, frequent drought shocks, and over-reliance on rainfed agriculture inhibit the realization of maize production potential in the county.

Figure 19: Maize yield (MT/HA)

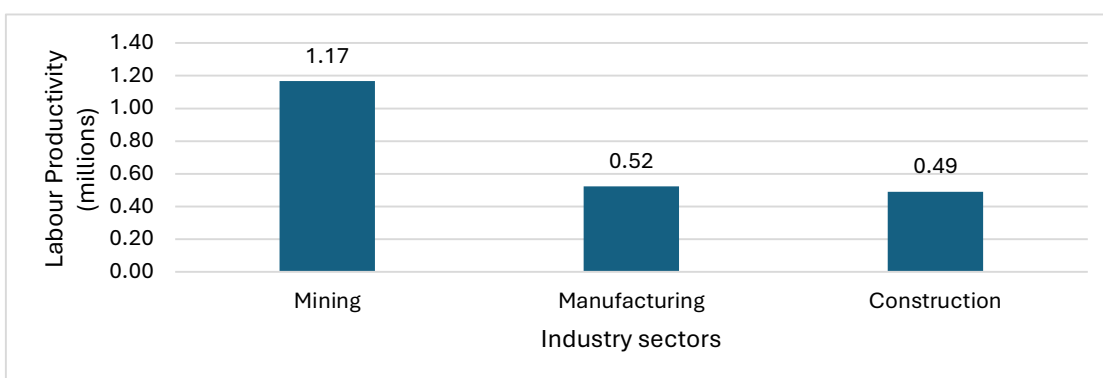


Data source: NIPFN

Industry Sector

The mining sub-sector has the highest labour productivity in the industry broad sector as shown in Figure 20.

Figure 20: Labour productivity by industry sectors

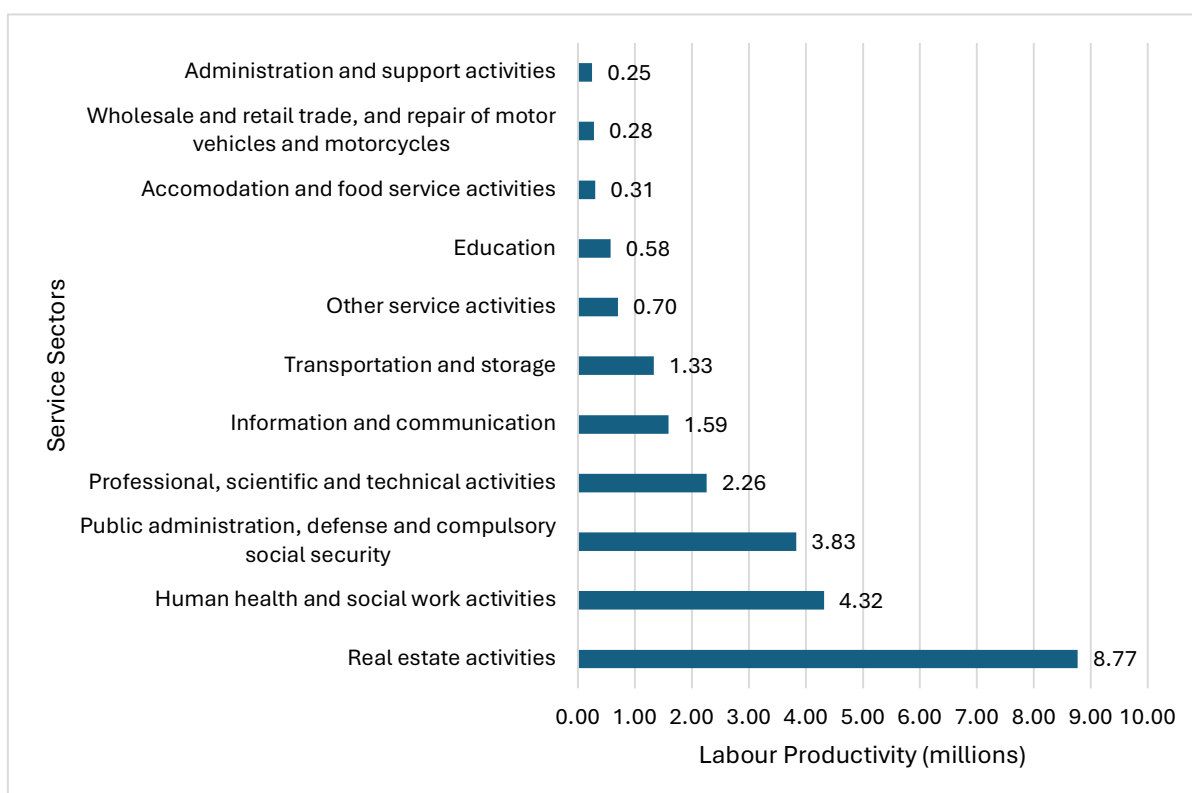


Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

Services Sector

Real estate had relatively higher labour productivity when compared with others within the services sector as shown in Figure 21.

Figure 21: Labour productivity in services sectors



Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

Key Messages

- (i) The service sector dominates the shares of county GVA while the industry sector has been declining and the least. Although crop production is the main sub-sector in agriculture, its potential is hindered by aridity and drought shocks as production is rainfed. In livestock production, there is a potential in the poultry value chain and apiculture. Manufacturing and construction are other important activities in the county's industry sector. However, the share of manufacturing has been declining over the years while that of construction expanded and dominated. The public administration and defence sector – a non-market service – dominates the services sector GVA.

- (ii) The indicators of the quality of labour are within the national averages. However, interventions are required to reduce stunting, teenage pregnancies, and child poverty.
- (iii) The majority of the essential infrastructure that supports the growth of county GVA is within the national averages. Interventions are needed to increase electricity and internet connectivity, rural access, and access to improved water.
- (iv) The agriculture sector is the highest employer in the county. In agriculture, the majority are practicing mixed farming. Most of those working in the industry sectors are in the construction sub-sector while manufacturing has the second highest share of employment with the majority of employed in the textiles and repair and installation of machinery and equipment industries. The majority of those working in the service sector are in wholesale and retail trade, with the majority working in retail of food, beverages, and tobacco products.
- (v) Labour productivity in the county is lower than the national average labour. The industry sector had the highest productivity, followed by the services sector while the agriculture sector had the least labour productivity. The mining sub-sector has the highest labour productivity in the industry sector, while the real estate sub-sector has the highest in the services sector.

Policy Recommendations

- (i) Build climate resilience in agriculture. This can be achieved by encouraging growing of drought-resistant and fast-maturing crops, facilitating the uptake of crop insurance, and optimizing the utilization of information from the early warning systems to inform crop production to improve agricultural productivity. Also, promote livestock production, especially the poultry value chain and apiculture, which uses more climate-smart agriculture.
- (ii) Improve the quality of labour by implementing nutrition-sensitive social protection programmes to address stunting and child poverty. Additionally prioritize reduction of teenage pregnancies by creating awareness and facilitating teenage mothers to go back to school.
- (iii) Invest in the provision of essential infrastructure and capital to support private sector growth and to attract investments to the county. Of priority are increasing electricity and internet connectivity, and access to improved water.
- (iv) Exploit the potential in mining to grow the industrial sector.

Acknowledgment

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