



Policy Brief

Thinking Policy Together

No. 71/2023-2024

Assessing Labour Productivity for Murang'a County

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Overview of the County

Murang'a County is a member of the Central Region and Economic Bloc (CEREB). The county is a non-ASAL county experiencing less than 10 per cent aridity levels. The land mass of Murang'a County is 2,326 km² and has nine sub-counties namely: Murang'a East, Kangema, Mathioya, Kahuro, Murang'a South, Gatanga, Kigumo, Kandara, and Aberdare Forest.

Key Highlights

The productivity of Murang'a County is characterized by the following:

- i. The agriculture sector has the highest share of county Gross Value Added (GVA) with high potential in crop farming and a thriving dairy sector. The construction sub-sector dominates the industry sector while the transportation and storage sub-sector dominates the services sector.
- ii. The quality of labour requires a continued increase in immunization rates, reducing stunting and teenage pregnancies, and child poverty.
- iii. The essential infrastructure requires increased access to electricity, internet connectivity, and improved water and sanitation.
- iv. The agriculture sector is the highest employer, with the majority practicing mixed farming. Employment in manufacturing is in wood and food products. Those in wholesale and retail trade are mainly in other retail in specialized stores.

- v. Labour productivity is highest in the service sector, and agriculture the lowest labour productivity. Manufacturing leads in the industry sector while professional, scientific and technical activities have higher labour productivity in the service sector.

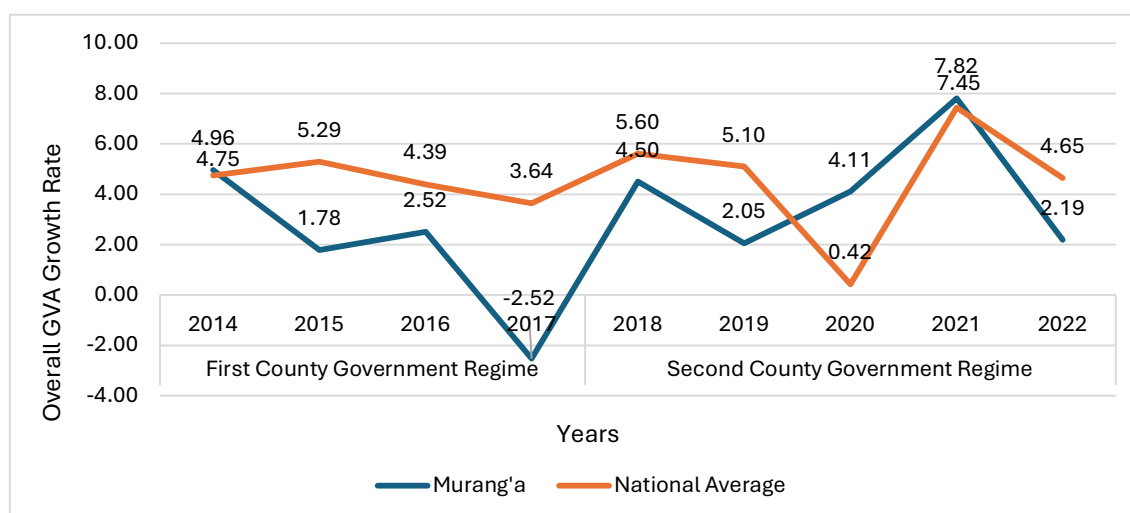
To enhance productivity, there is a need to:

- i. Increase agriculture productivity, integrate the small farmers into the dairy and leather value chains, and promote emerging activities like apiculture.
- ii. Attract investments in manufacturing to grow mining and construction sub-sectors and increase agro-processing.
- iii. Secure quality of labour with nutrition-sensitive social protection programmes to reduce child poverty and stunting.
- iv. Invest in essential infrastructure including electricity, internet connectivity, and improved water and sanitation.

Murang'a County Economic Performance

Murang'a County contributes on average 2.0 per cent of the National Gross Value added with an average GVA of Ksh 146,1204 million. The GVA per capita for Murang'a County is Ksh 138,291.84 with an average population growth rate of 1.3 per cent and an overall poverty rate of 26.7 per cent. Murang'a County has shown a steady growth in GVA with an average growth rate of 3.05 per cent in 2013-2022 which is lower than the national average growth of 4.37 per cent (Figure 1). The highest growth rate was in 2021, and the lowest growth rate was in 2017.

Figure 1: Murang'a County GVA growth rate

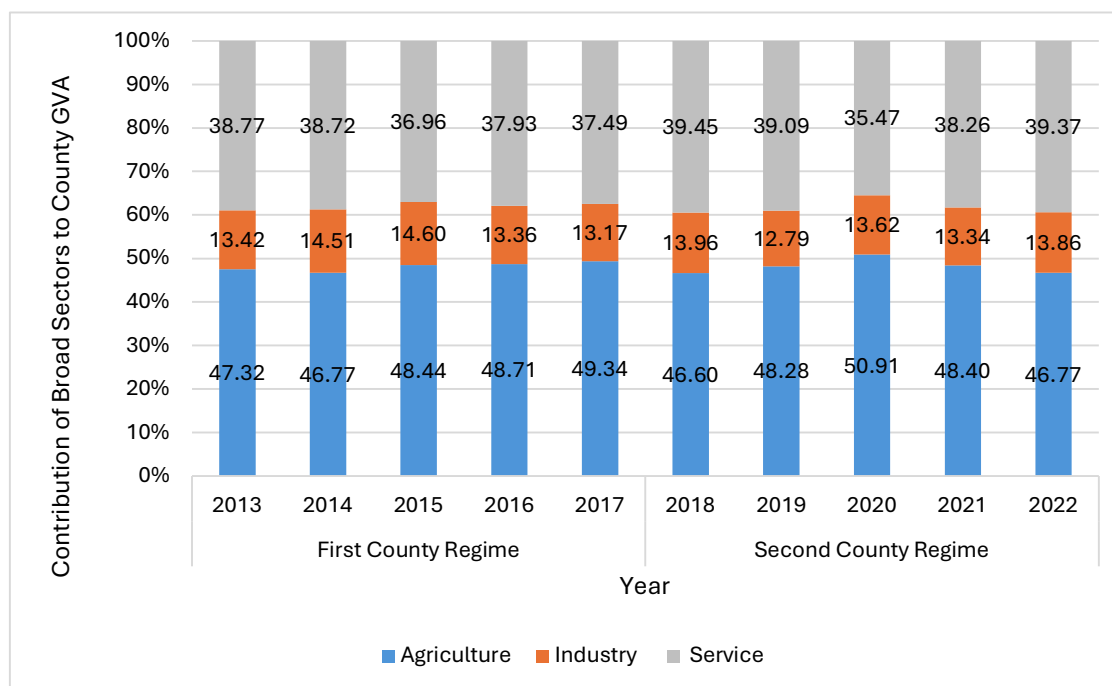


Data source: KNBS 2023-Gross County Product

Sectoral Contribution to County Gross Value Added

The agriculture sector is dominant in Murang'a County with an average contribution to GVA of 48.15 per cent. The services sector is second, contributing an average of 38.15 per cent to the GVA while the industry sector contributes about 13.66 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Murang'a County GVA

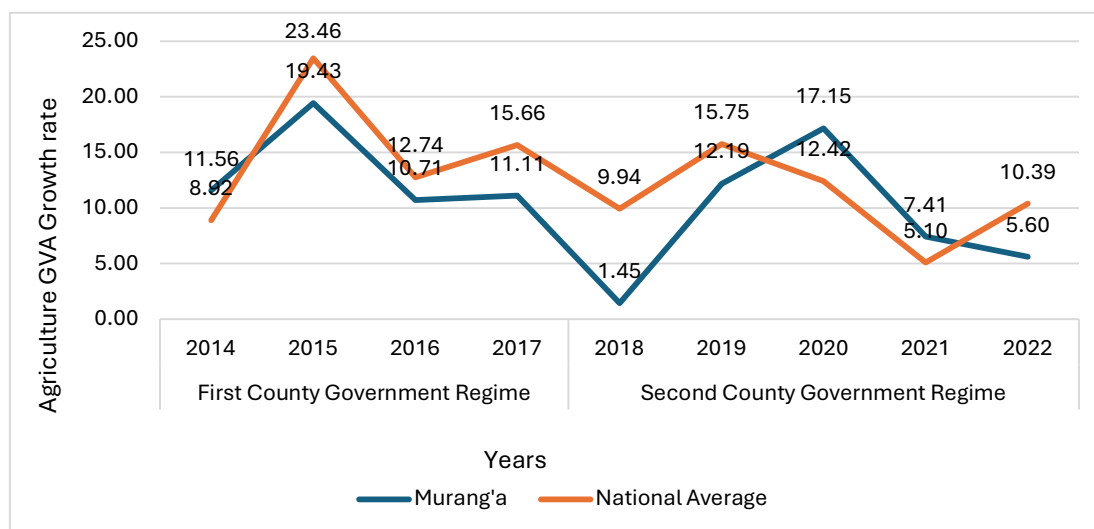


Data source: KNBS 2023-Gross County Product

Agriculture Sector

The average growth rate of agriculture GVA in 2013-2022 for Murang'a County is 10.74 per cent, which is below the national average of 12.71 per cent as shown in Figure 3.

Figure 3: Murang'a County agriculture GVA growth rate

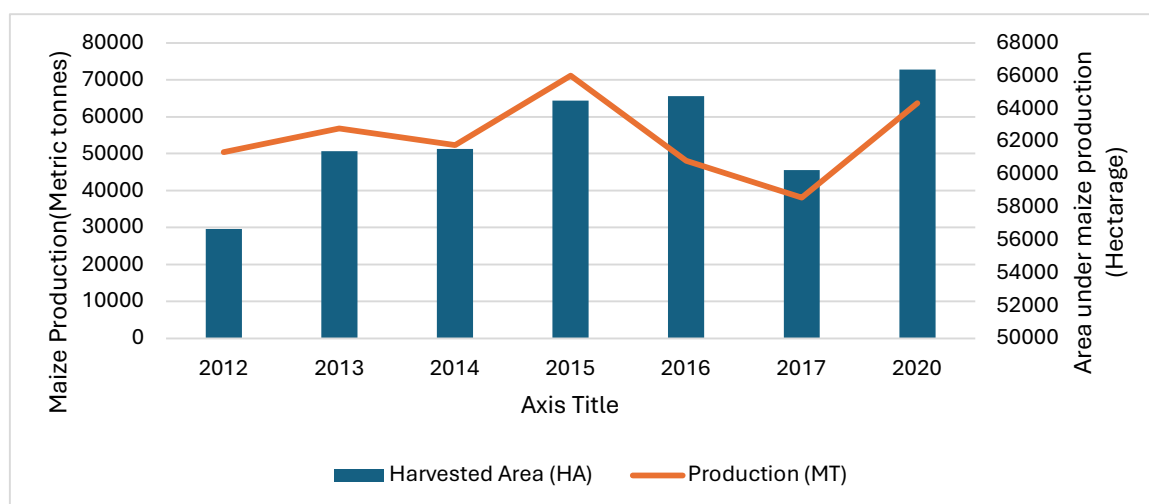


Data source: KNBS 2023-Gross County Product

Agriculture sector

The agriculture sector is an important economic activity in Murang'a County with the main farming systems being crop farming (food and cash crops), mixed farming, livestock keeping, and fish farming. The area under maize production has generally increased over the years with a decline in 2017. While maize production (metric tonnes) has shown fluctuations within the same time as shown in Figure 4.

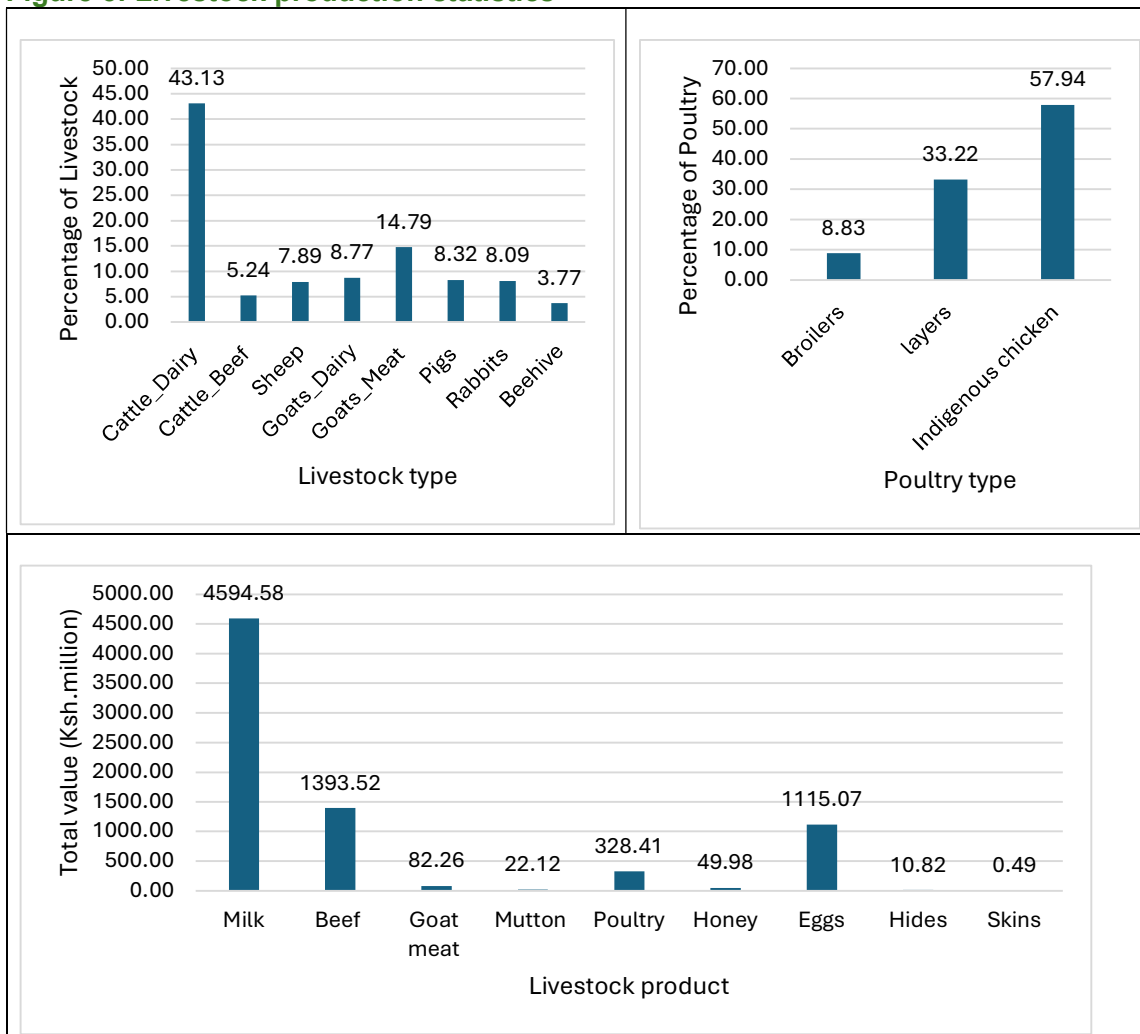
Figure 4: Maize production and area under maize production



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

Livestock production is also an important sub-sector mainly practiced in mixed crop-livestock farming systems. The main livestock kept is dairy cattle, the county has a booming dairy sector as livestock production has been optimally integrated into the dairy value chain. Meat goats, dairy goats, and pigs are also commonly kept. Poultry farming is common and highly diversified with indigenous chicken and layers being the most common poultry type. Milk has the highest economic value among the livestock products reflecting the comparative advantage the county has in dairy farming. Eggs and beef also have high economic values (Figure 5).

Figure 5: Livestock production statistics

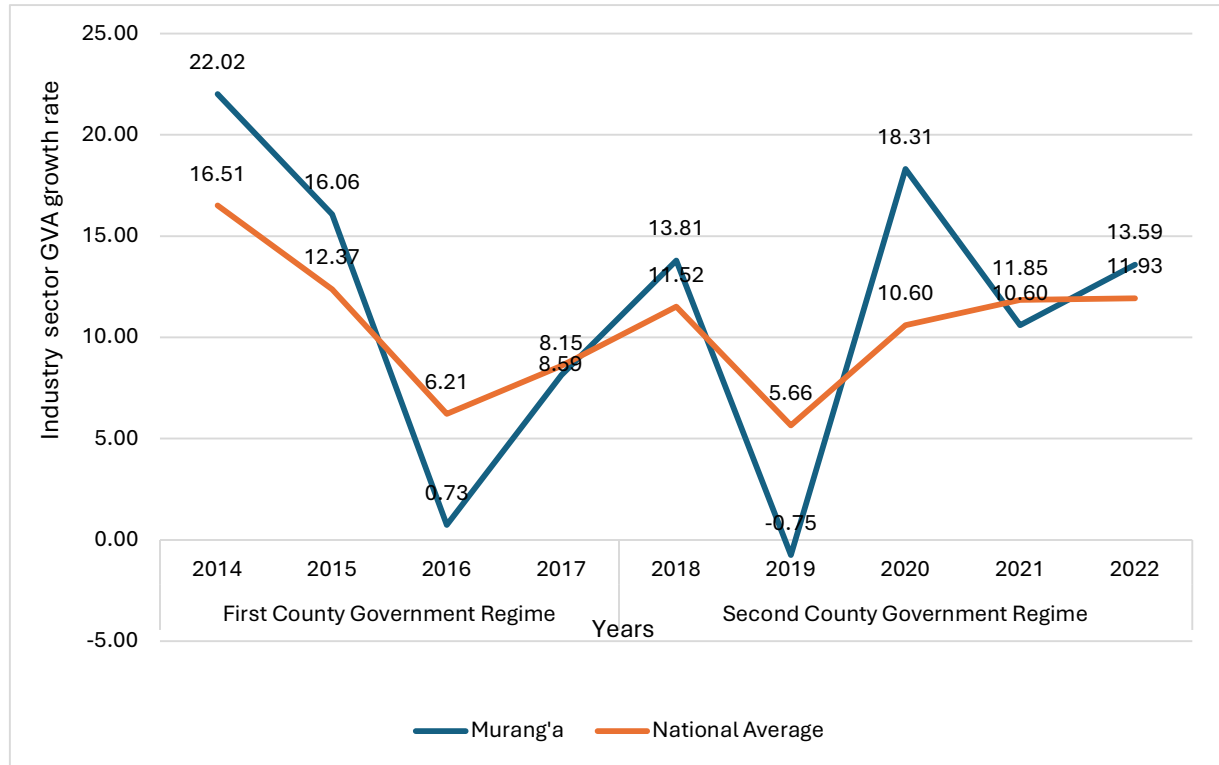


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The average growth rate of the industry sector is 11.39 per cent, which is above the national average of 10.58 per cent as shown in Figure 6.

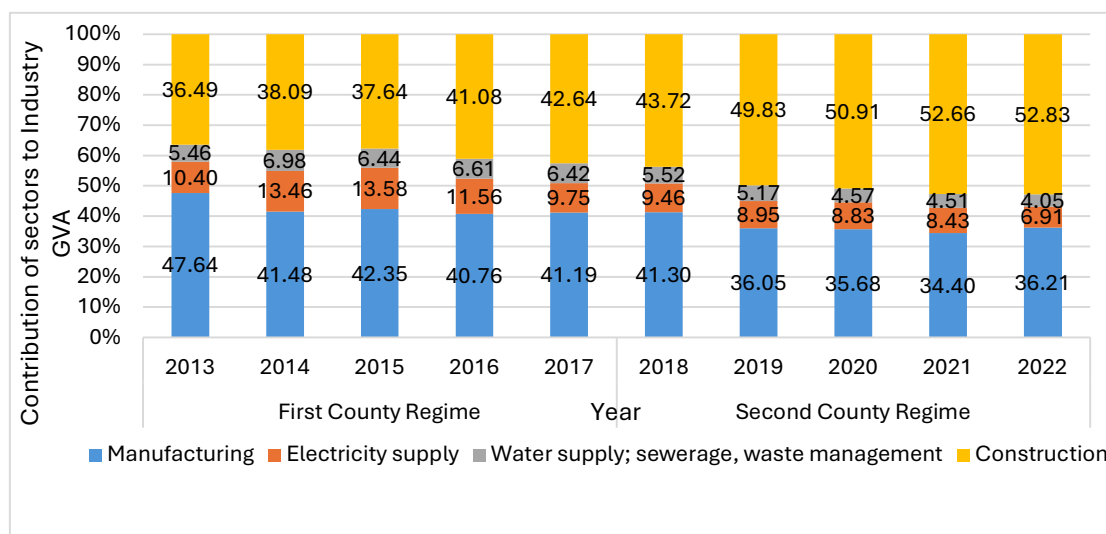
Figure 6: Murang'a County industry GVA growth rate



Data source: KNBS 2023-Gross County Product

Manufacturing and construction are other important sectors in Murang'a County as they dominate the industry sector. Construction sub-sector dominates the industry sector GVA. The trend over the years under review show decline in the share of manufacturing in industry GVA and expansion of the share of the construction sector (Figure 7).

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

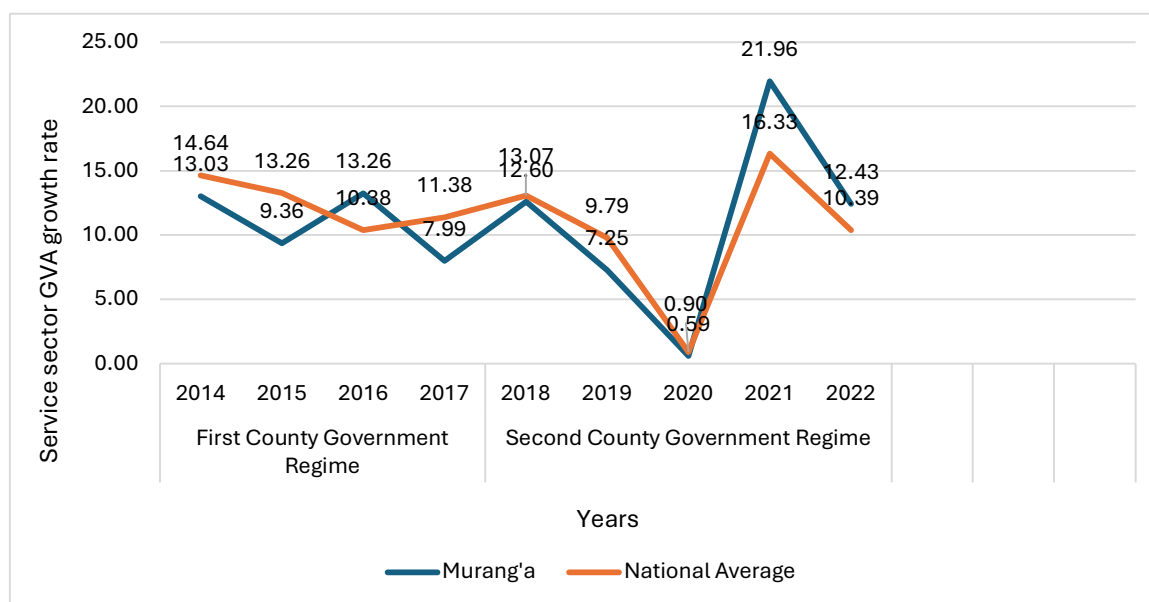


Data source: KNBS 2023-Gross County Product

Services Sector

The average growth rate of the services sector is 9.73 per cent, which is below the national average of 11.13 per cent as shown in Figure 8.

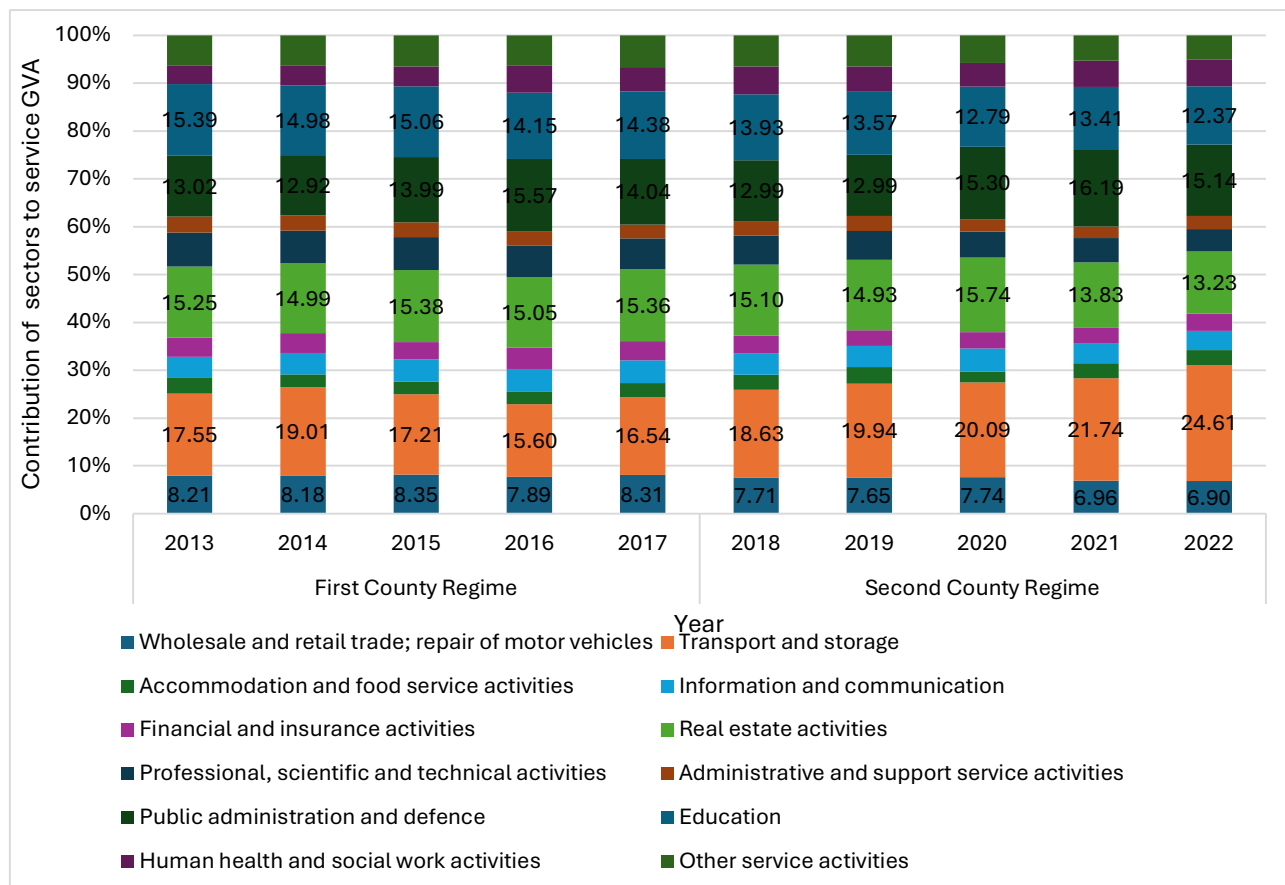
Figure 7 : Murang'a County services sector GVA growth rate



Data source: KNBS 2023-Gross County Product

The transportation and storage sub-sector dominated the services sector with the highest contribution to services GVA at 19.09 per cent. The real estate sub-sector is the second highest contributor to services GVA at 14.89 per cent. The public administration and defence sub-sector is third at an average of 14.22 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 in Murang'a County

Murang'a County has a total of 624,482 working-age population, which is about 59.10 per cent of the total county population. Most of the working-age population are 35-64 years at 49.17 per cent (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	35,622	33,018	68,640	10.99
18 -24	57,899	54,354	112,253	17.98
25-34	67,203	69,329	136,532	21.86
35-64	151,872	155,185	307,057	49.17
Total	312,596	311,886	624,482	

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

Most of the population in Murang'a sub-counties are persons in the working age categories. Murang'a East has the highest percentage of working-age persons at 61.63 per cent as reported in Table 2.

Table 2: Sub-county land area 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	
Murang'a East	110,310	6,755 (9.94)	13,033 (19.17)	16,357 (24.06)	31,837 (46.83)	67,982 (61.63)
Kangema	80,444	5,197 (10.86)	7,802 (16.31)	9,437 (19.73)	25,401 (53.10)	47,837 (59.47)
Mathioya	88,186	5,728 (10.91)	8,345 (16.35)	9,255 (20.40)	27,740 (52.34)	51,068 (57.91)
Kahuro	169,313	13,071 (11.22)	21,714 (16.34)	23,013 (18.12)	34,700 (54.32)	92,498 (54.63)
Murang'a South	184,819	12,285	20,852	25,519	51,089	109,745

		(11.19)	(19.00)	(23.25)	(46.55)	(59.38)
Gatanga	187,985	12,621 (11.28)	20,922 (18.70)	25,428 (22.73)	52,923 (47.30)	111,894 (59.52)
Kigumo	136,918	8,697 (10.89)	13,923 (17.44)	17,495 (21.92)	39,716 (49.75)	79,831 (58.31)
Kandara	175,091	11,472 (11.23)	18,550 (18.16)	22,026 (21.56)	50,105 (49.05)	102,153 (58.34)

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

The socioeconomic indicators that affect the quality of labour in Murang'a County performed above the national average. Despite this, more is needed to continue increasing immunization rates, reducing stunting and teenage pregnancies, and achieving 100 per cent secondary school transition rate (Table 3).

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	86.90	78.41
Pre-primary net enrolment rate (2019)	80.83	67.51
Primary school net enrolment rate (2020)	94.40	77.72
Secondary school net enrolment rate (2020)	101.90	54.18
Average years of schooling (2014)	8.70	7.78
Percentage of children 12 -23 months fully vaccinated (%)	86.40	74.97
Percentage of stunted children	10.10	19.75
Percentage of teenage pregnancy	7.40	15.79
Primary to secondary transition rates (2020)	92.20	86.13
Pupil-teacher ratio (primary school)	24.00	28.28

Food poverty headcount (%)	22.60	33.63
Child poverty headcount (%)	26.60	42.67

Data source: KNBS (2022), Kenya Demographic and Health Survey - 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

The majority of the essential infrastructure and capital indicators in Murang'a County are higher than the national average as reported in Table 4. Efforts are required to increase internet connectivity in schools and at the household level.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census)	60.50	38.52
Distribution of population using the Internet (2019 census)	20.70	18.69
Rural Access Index (2018)	97.22	63.72
Access to improved sanitation (2018)	66.00	59.04
Access to improved water (2018)	67.80	65.33
Financial inclusion level (2021)	92.80	81.01
The proportion of primary schools with internet	27.10	27.65
Proportion of secondary schools with functional internet	37.00	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	66.18	51.71
Percentage of households using bank usage (overall)	52.90	38.18
Percentage of households using mobile money	90.40	78.58

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

County Employment Statistics

The employment-to-population ratio is at 74.41 per cent. Most of those working are the non-youth population (35-64 years) at 45.58 per cent. While that for the youth (18- 34 years) is at 28.04 per cent. The percentage of the employed by gender is 51.02 for males and 53.04 for females (Table 5). The unemployment rate is at 5.33 per cent and slightly higher for the youth (18-34 years) at 3.19 per cent and those in 35-64 years at 2.06 per cent.

The percentage of persons between 5-17 years old working is 1.62 per cent indicating that the county has low levels of child labour. The inactivity rate for the youth (15-24 years) is at 17.06 per cent as most are pursuing education while that of the prime age (25-64 years) is 2.74 per cent as shown in Table 5.

Table 2: Murang'a County employment statistics

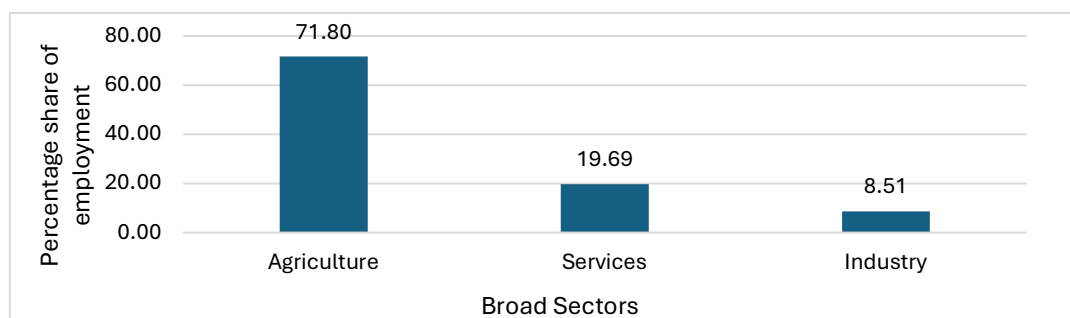
Employment statistics	Youth	Non youth
Employment to population ratio (%)	28.04	45.58
Unemployment rate	3.19	2.06
Percentage of persons 5–17 years old working	1.62	-
Inactivity rate	17.06	2.74

Data source: KNBS 2021- Kenya Continuous Household Survey

Sectoral Employment

The agriculture sector is the highest employer in Murang'a County at 71.80 per cent followed by the services sector at 19.69 per cent. The industry sector is third at 8.51 per cent (Figure 10).

Figure 10: Percentage of persons employed in the broad sectors

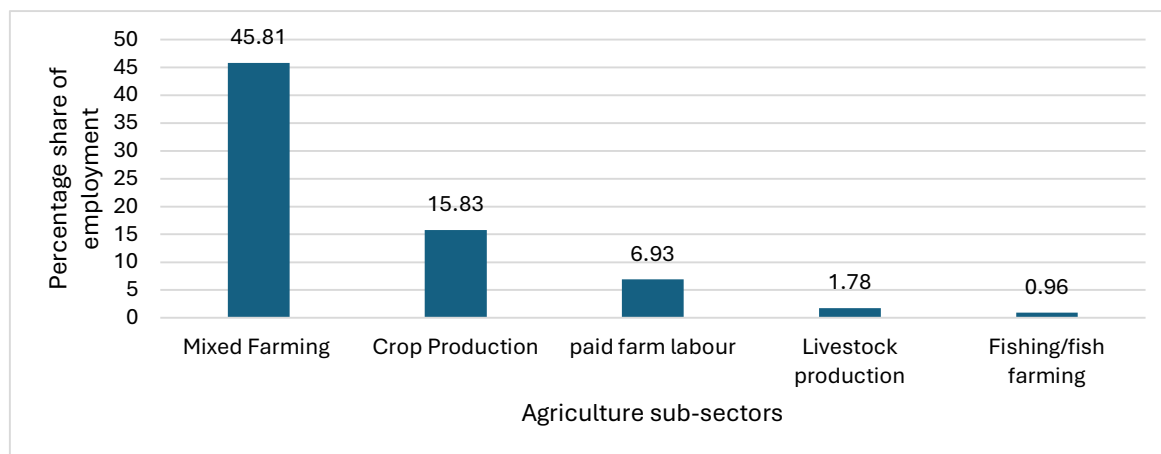


Data source: KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector

In agriculture, the majority are those practicing mixed farming which mainly entails dairy farming alongside crop farming as shown in Figure 11.

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

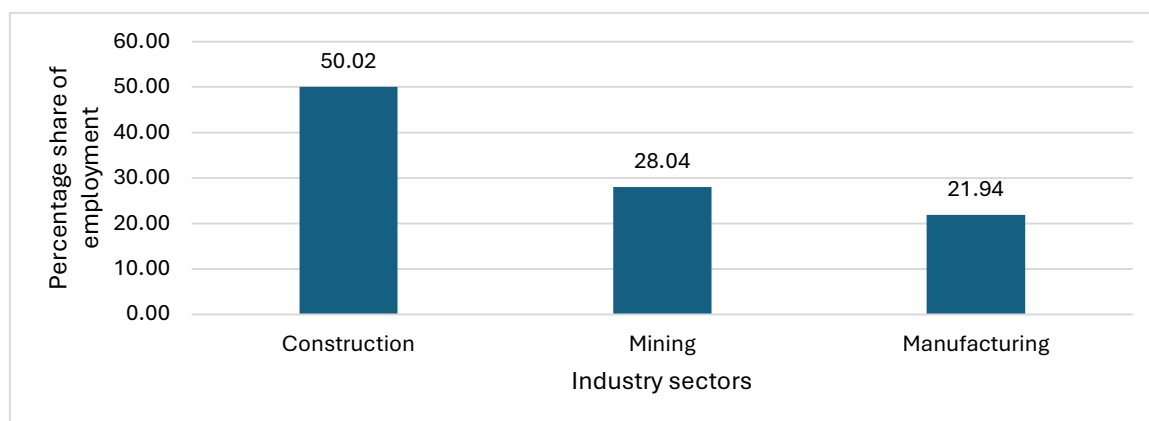


Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector

The construction sub-sector has the highest share of employment in the industry sector. Mining has a substantial share of employment slightly higher than that of manufacturing (Figure 12).

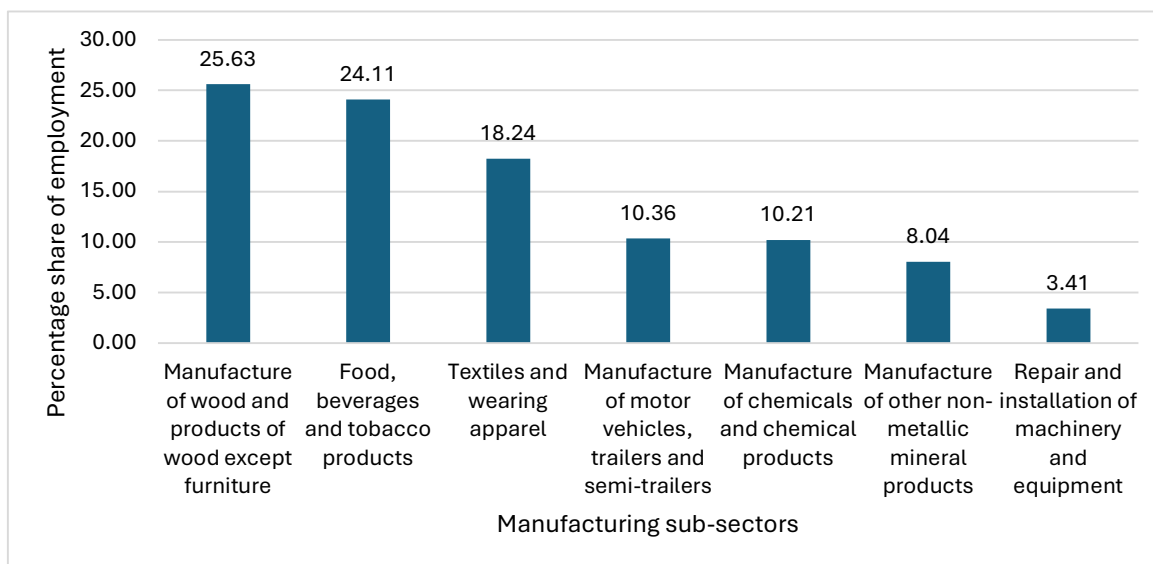
Figure 12: Percentage share of employment in the industry sectors



Data source: KNBS 2021- Kenya Continuous Household Survey

A disaggregation of employment in manufacturing shows that the majority of those employed in the sector, work in low-technology manufacturing sub-sectors of wood and agro-processing industries as shown in Figure 13.

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

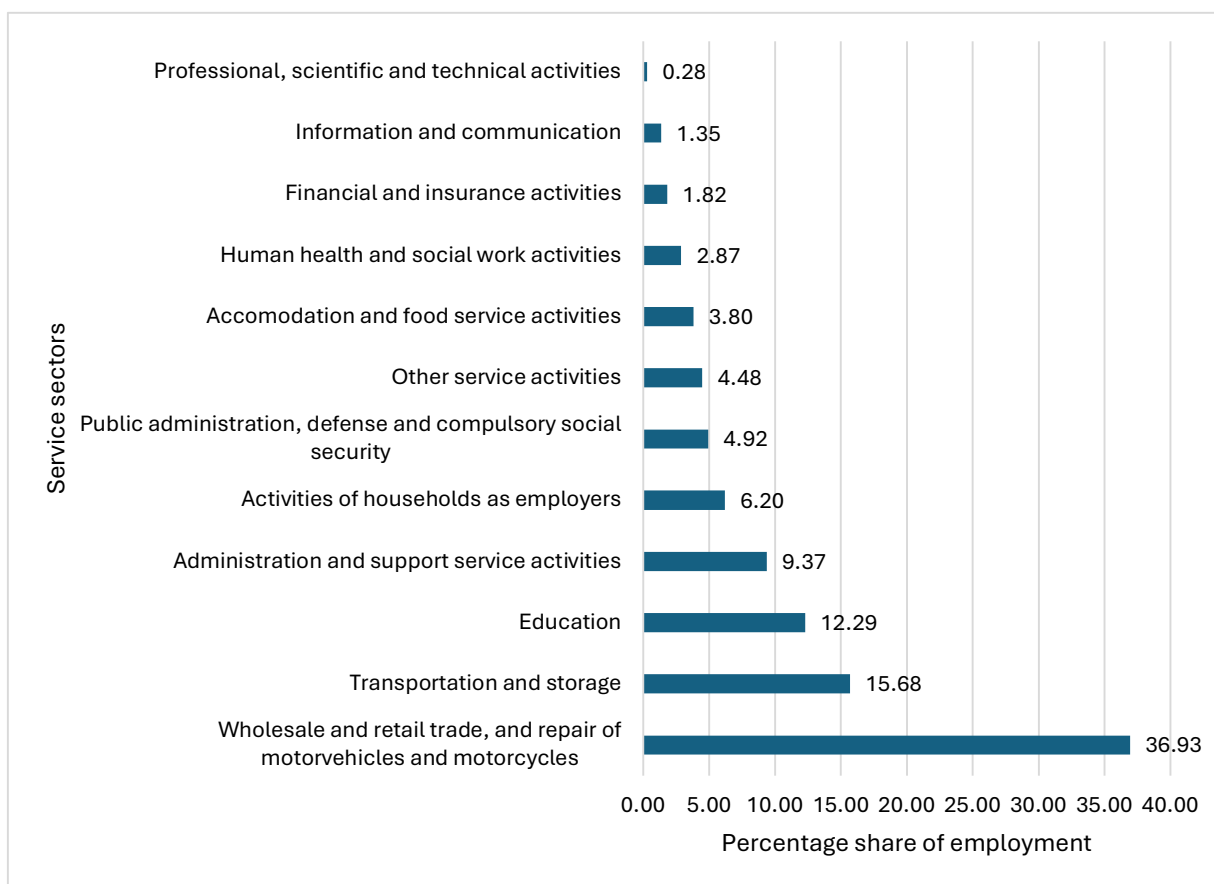


Data source: KNBS 2021- Kenya Continuous Household Survey

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 reported in Figure 14.

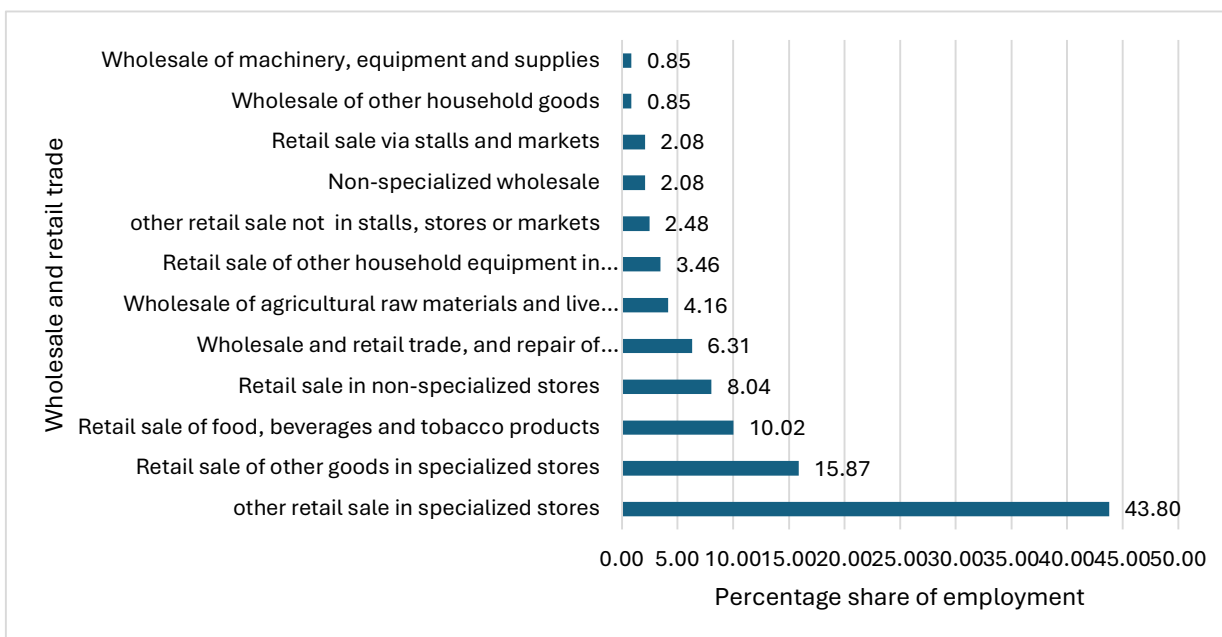
Figure 14: Percentage share of employment in the service sector



Data source: KNBS 2021- Kenya Continuous Household Survey

In the wholesale and retail trade, and repair of motor vehicles and motorcycles, the majority work in other retail sales in specialized stores as shown in Figure 15.

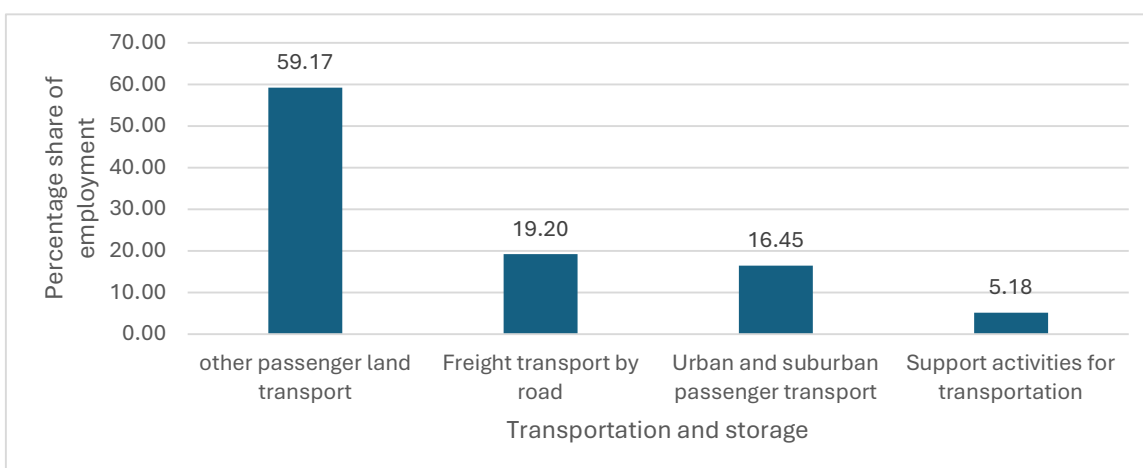
Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors



Data source: KNBS 2021- Kenya Continuous Household Survey

Passenger land transport sub-sector dominates employment in the transportation and storage sub-sector (Figure 16)

Figure 16: Percentage share of employment in the transportation and storage sub-sectors

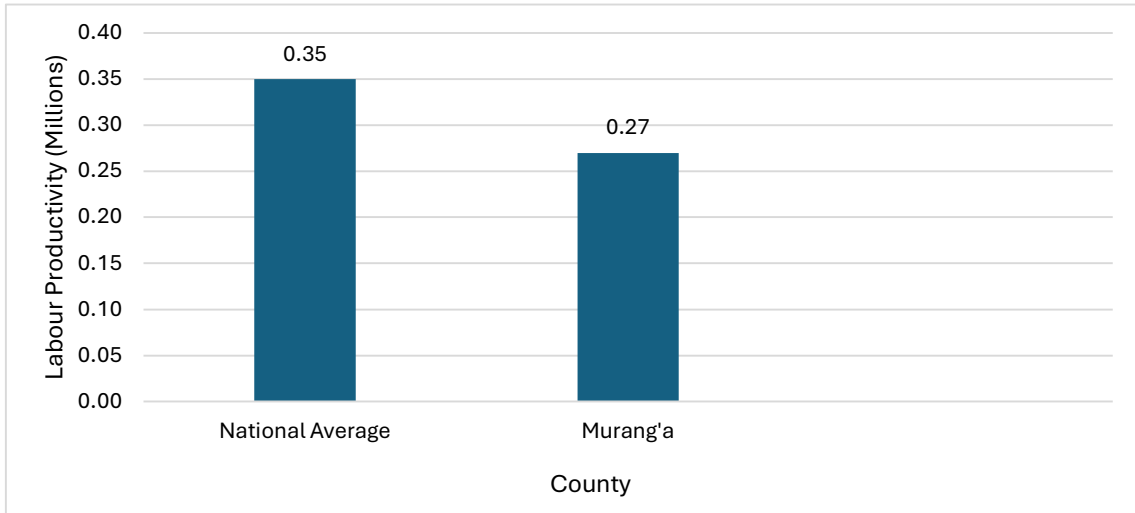


Data source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity¹ for Murang'a County is lower than the national average as reported in Figure 17.

Figure 17: Labour productivity ratios (millions)

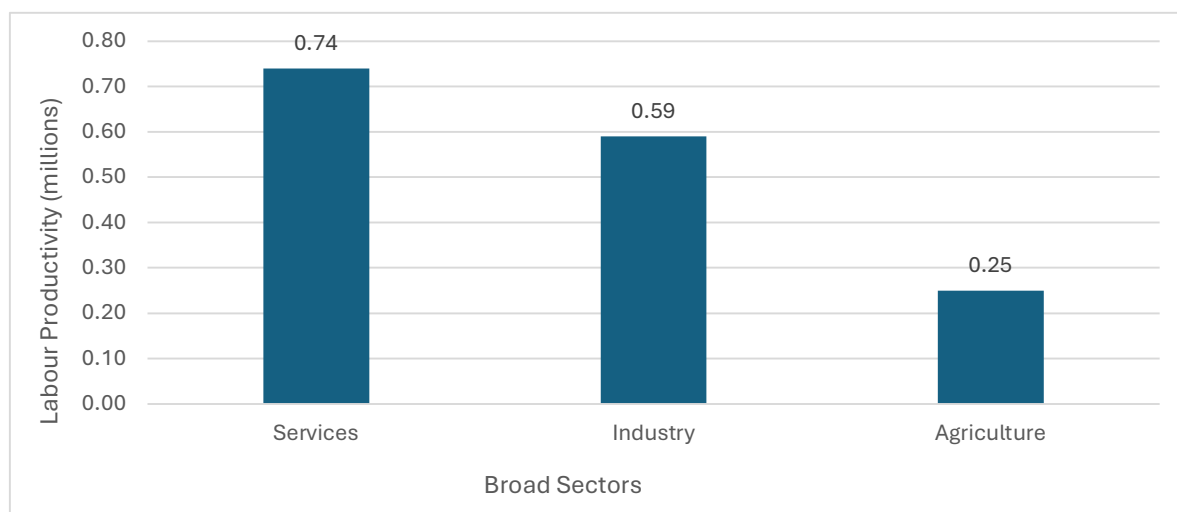


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

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

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

Figure 18: Labour productivity by sectors

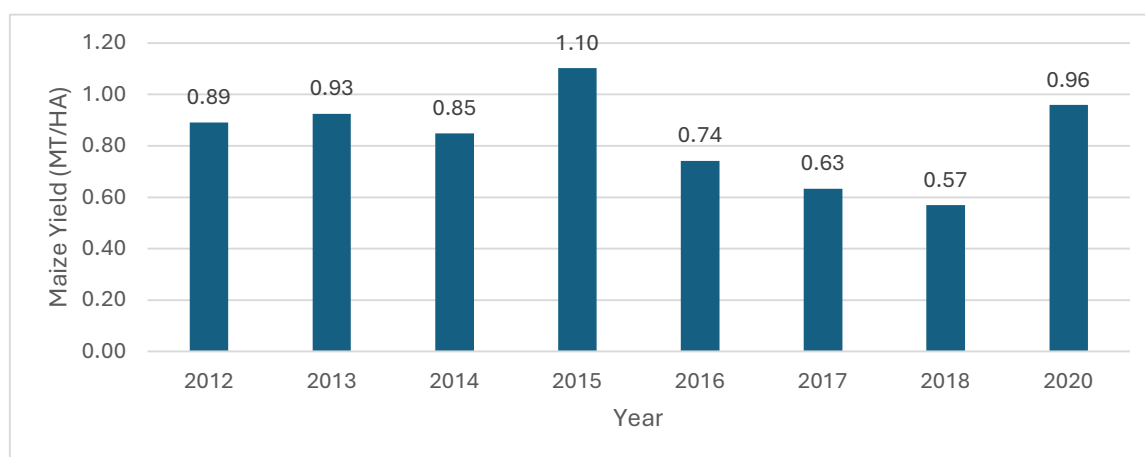


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector

Maize productivity measured by yields has shown fluctuations over the eight (8) years under review and has generally shown a downward trend after 2015, which had the highest yields (Figure 19). The average yield is 0.83, which is low when compared to other non-ASAL counties. Possible causes could be increasing cultivation of maize for silage to support dairy farming which lowers the production of maize grains.

Figure 19: Maize yield (MT/HA)

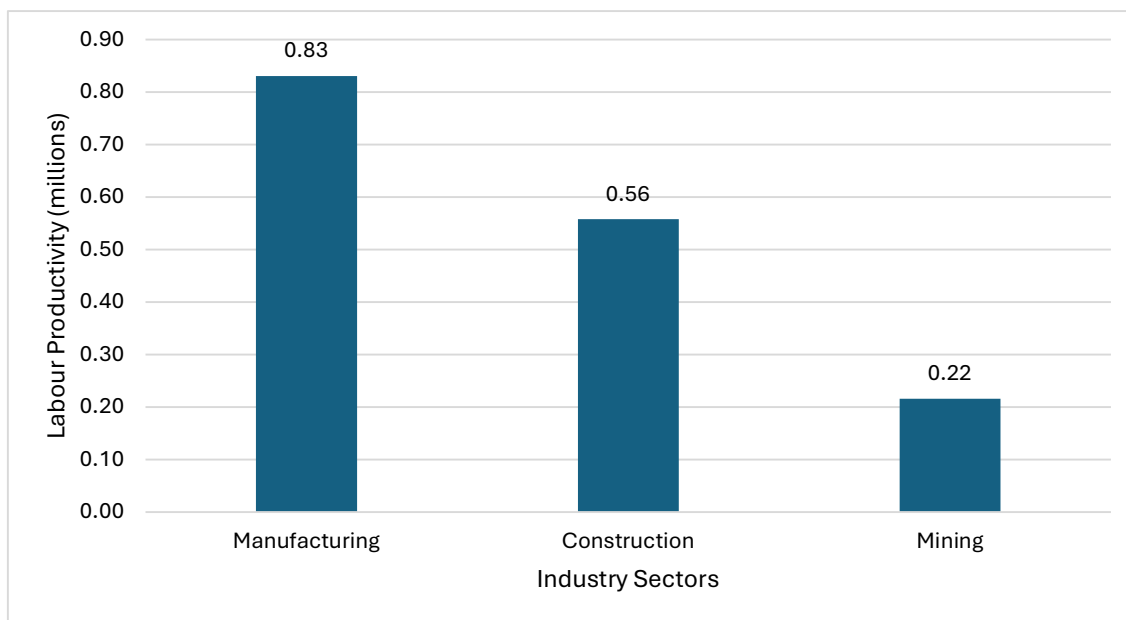


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The manufacturing and construction sub-sectors had the highest labour productivity in the industry broad sector (Figure 20).

Figure 20: Labour productivity by industry sub-sectors

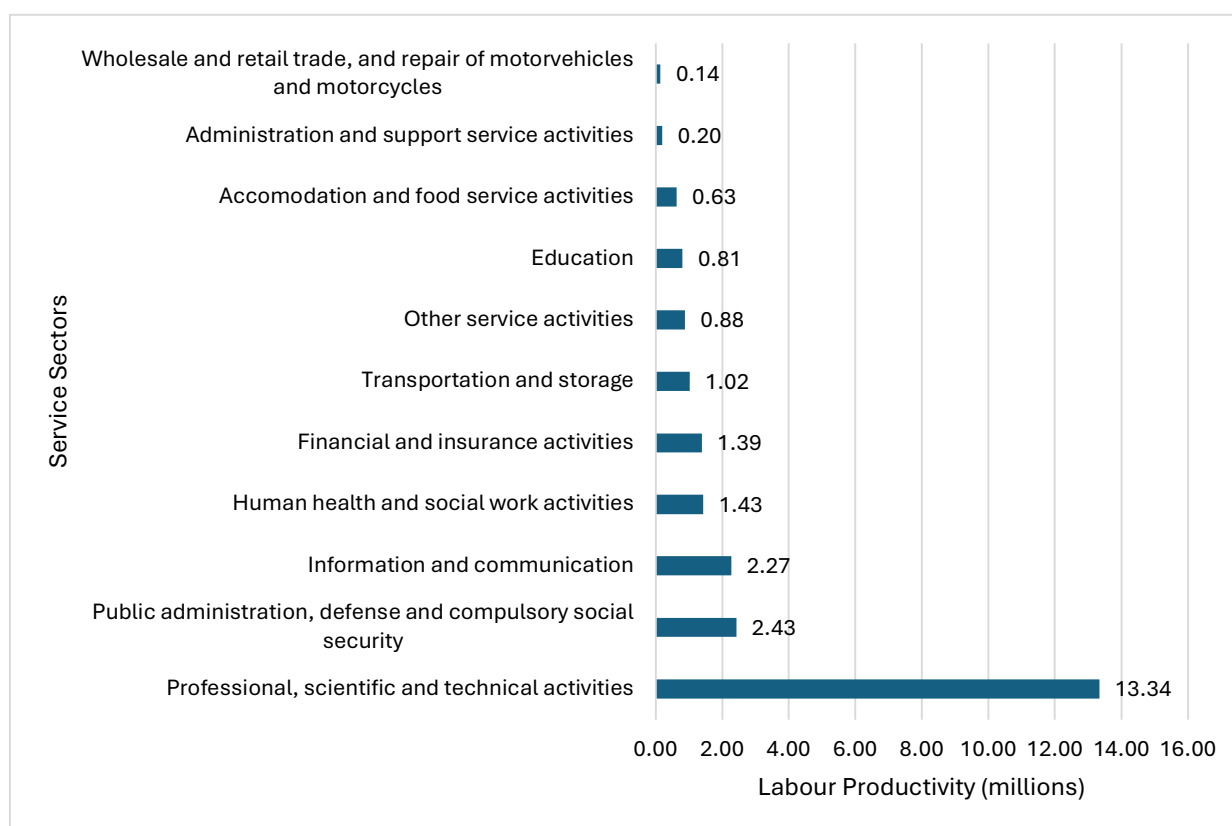


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Services Sector

Professional, scientific and technical activities sector had relatively higher labour productivity when compared with other sectors within the services broad sector (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 agriculture sector has the highest share of County Gross Value Added while the industry sector has the least. The county has high potential in crop farming and a thriving dairy sector. Apiculture and the leather industry are emerging. Poultry farming is highly diversified. The construction sector dominates the industry sector GVA while the transportation and storage sector dominate the services sector GVA.
- ii. The indicators of quality of labour in the county performed above the national average. Despite this, more needs to be done to continue increasing immunization rates, reduce stunting and teenage pregnancies, and continue with efforts to reduce child poverty.
- iii. The majority of the essential infrastructure and capital indicators in the county are higher than the national average. However, efforts are required to increase electricity, internet connectivity, and access to improved water and sanitation.

- iv. The agriculture sector is the highest employer in the county with the majority practicing mixed farming. The construction sector has the highest share of employment in the industry sector while employment in manufacturing is in wood and food products. The majority of those working in the service sector are in wholesale and retail trade mainly in other retail in specialized stores.
- v. Labour productivity in the county is lower than the national average labour productivity. The services sector has the highest labour while the agriculture sector has the lowest labour productivity. Manufacturing has the highest labour productivity in the industry sector while professional, scientific, and technical activities have higher labour productivity in the services sector.

Policy Recommendations

- i. Transforming agriculture remains a priority to increase agriculture productivity. This includes increased investments towards developing the livestock value chain to integrate the small farmers into the dairy and leather value chains, focusing attention on emerging activities like apiculture, and building skills for farmers to uptake technologies that improve productivity.
- ii. Encourage investments in manufacturing, mining, and construction sub-sectors and support the transformation of the agriculture sector by engaging in agro-processing; and supporting the County Aggregation Industry Park to enhance productivity of the MSMEs.
- iii. Secure quality of labour with nutrition-sensitive social protection programmes to reduce child poverty and stunting.
- iv. Create an enabling environment for private sector growth by investing in essential infrastructure, of priority is electricity and internet connectivity and access to improved water and sanitation.

Acknowledgment

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.

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KIPPRA acknowledges generous support from the Government of Kenya, and development partners who have continued to support the Institute's activities over the years.

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