# Assessing Labour Productivity for Bungoma County

*By Cecilia Naeku and Esther Irungu*

## Overview of the County

Bungoma County is a member of the Lake Region Economic Bloc (LREB). The county is a non-ASAL county that experiences less than 10 per cent aridity levels. The county land size stands at 2,207 km² and has twelve Sub-Counties, namely: Bumula, Bungoma Central, Bungoma East, Bungoma North, Bungoma South, Cheptais, Kimilili, Mt Elgon, Bungoma West, Tongaren, Webuye West, and Mt Elgon Forest.

## Key Highlights

The productivity of Bungoma County is characterized by the following:

(i) The services sector has the highest share county Gross Value Added (GVA), with transportation and storage services dominating. The share of the agriculture sector is equally high, characterized by mixed farming and crop production farming systems. The industry sector has the smallest share with a declining share of manufacturing.

(ii) The quality of labour requires interventions to reduce stunting, teenage pregnancy and child poverty, and increase enrolment in secondary school and immunization of children.

(iii) The essential infrastructure requires interventions to increase access to electricity, Internet connectivity, improved water, housing quality and financial inclusion.

(iv) The agriculture sector has the largest share of employment while the industry sector has the least. In agriculture sector, the majority are those working as paid farm labourers. The majority in manufacturing sub-sector are concentrated in manufacture of food products and textile and wearing apparel industries. In the wholesale and retail trade, majority are in other retail not in stalls, stores or markets.

(v)    Labour productivity is highest in the services sector and lowest in the agriculture sector, but there is potential to enhance crop yield. The construction sub-sector has the highest labour productivity in the industry sector while real estate has the highest in the services sector.

To enhance productivity

(i)    Enhance maize production by supporting the farmers with extension services, input subsidies, and prompt responses to pests and diseases. Further, enhance integration into the dairy, poultry, and leather value chain.

(ii)    Encourage investments in manufacturing to grow agro-processing and textile industry and support the County Aggregation Industry Parks to enhance the productivity of the MSMEs.

(iii)    Secure quality of labour with nutrition sensitive programmes and creating awareness and support teenage mothers to go back to school.

(iv)    Create an enabling environment for private sector growth by investing in essential infrastructure to improve access to electricity, Internet and improved water and increasing financial inclusion.

(v)    Market the tourism sites and encouraging investments in hotels improve quality of accommodation.

## Bungoma County Economic Performance

Bungoma County contributes on average to 2.1 per cent of the National Gross Value added with an average GVA of ksh 149,142.7 million. The GVA per capita for Bungoma County is Ksh 89,278.40 with an average population growth of 1.8 per cent and overall poverty levels at 43.9 per cent.

The GVA growth for Bungoma County was an average growth rate of 3.52 per cent in 2013-2022. The highest growth rate was at the advent of devolution in 2014. The lowest growth rate was experienced in 2015 and 2020 due to the COVID-19 pandemic as shown in Figure 1.
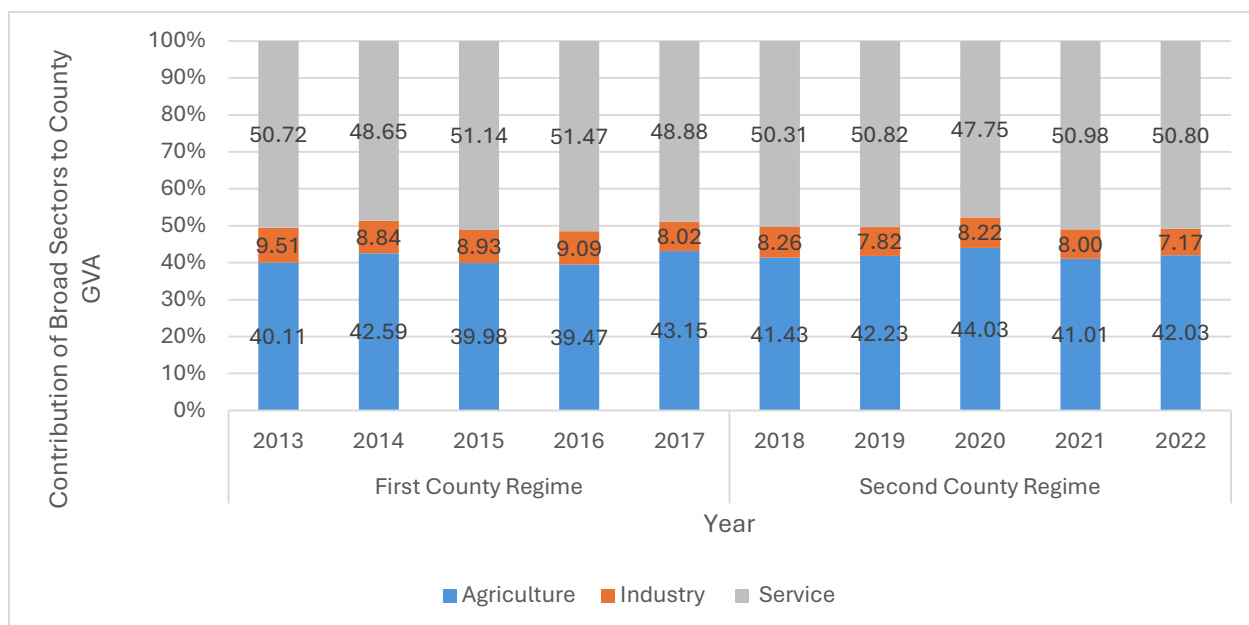
**Figure 1: Bungoma County GVA growth rate**
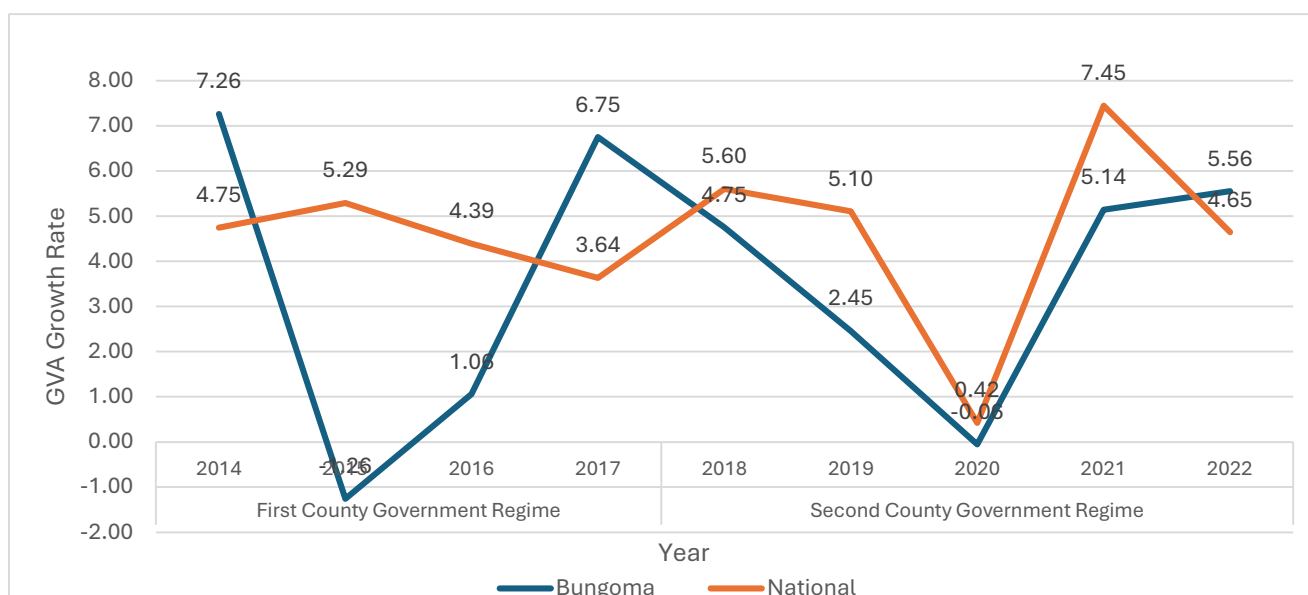


*Data Source: KNBS 2023-Gross County Product*

## Sectoral Analysis of GVA

The services sector is dominant in Bungoma County with an average contribution to GVA of 50.15 per cent between 2013 to 2022. The agriculture sector is second, contributing an average of 41.60 per cent to the GVA while the industry sector contributes about 8.39 per cent (Figure 2).
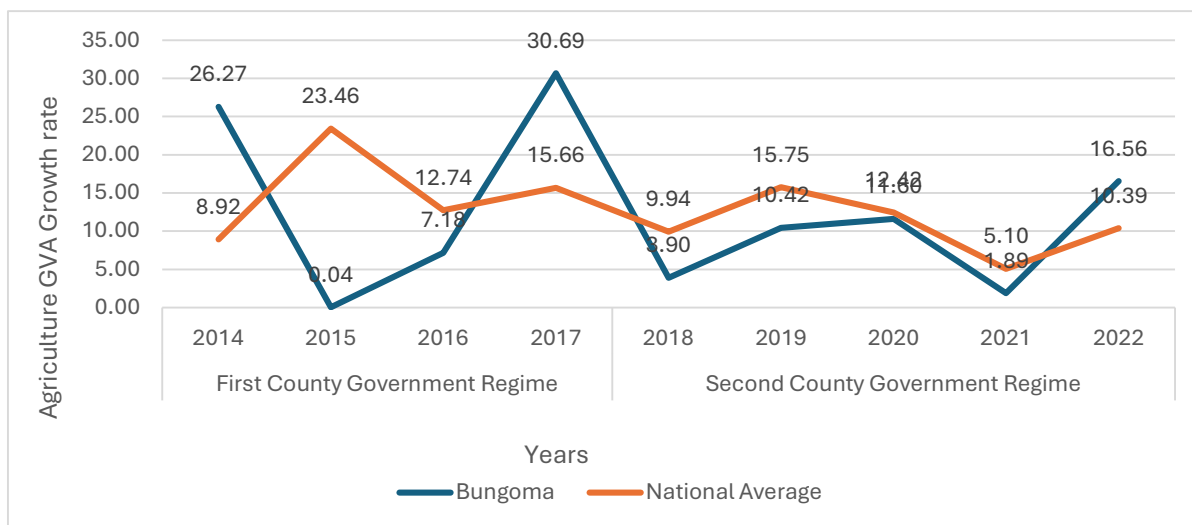
**Figure 2: Contribution of broad sectors to Bungoma County GVA**



*Data Source: KNBS 2023-Gross County Product*

The average growth rate in agriculture sector GVA in 2013-2022 is 12.06 per cent, below the national average of 12.71 per cent (Figure 3).

**Figure 3 : Bungoma County agriculture GVA growth rate**



*Data Source: KNBS 2023-Gross County Product*

Crop production dominates agriculture in Bungoma County. The crops commonly grown in the county include maize, beans, finger millet, sweet potatoes, and bananas. Maize production in the county shows fluctuation over the years. From a decline in both production and area under production in 2013 to increased production area between 2014 and 2016, the area under production declined from 2017 to 2020, maize production (metric tons) remained high and relatively constant within the same period (Figure 4).

**Figure 4 : Maize production and area under maize production**
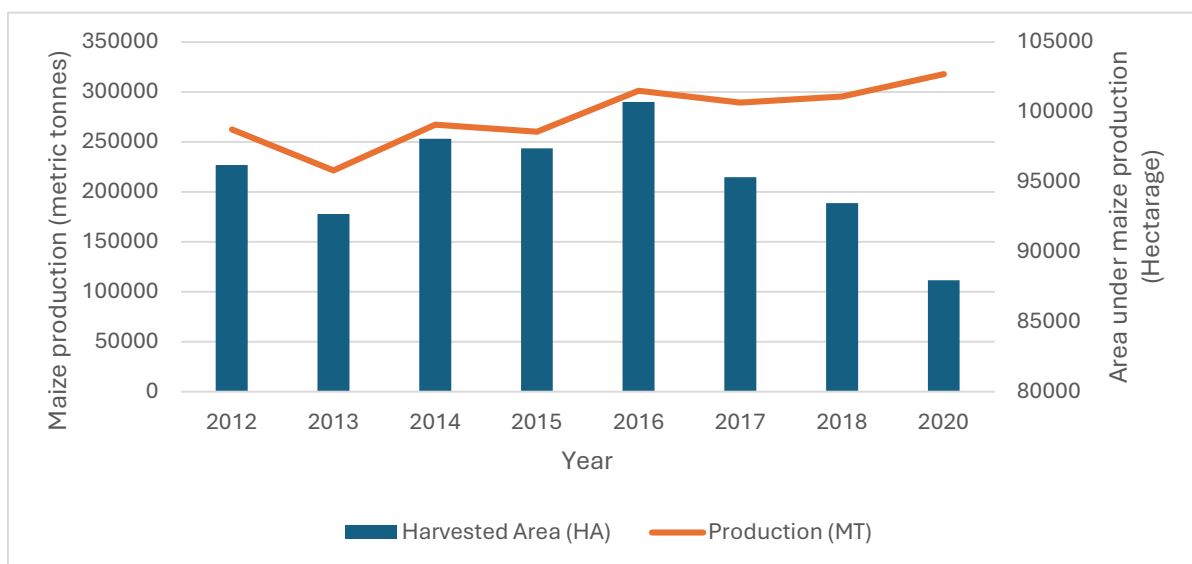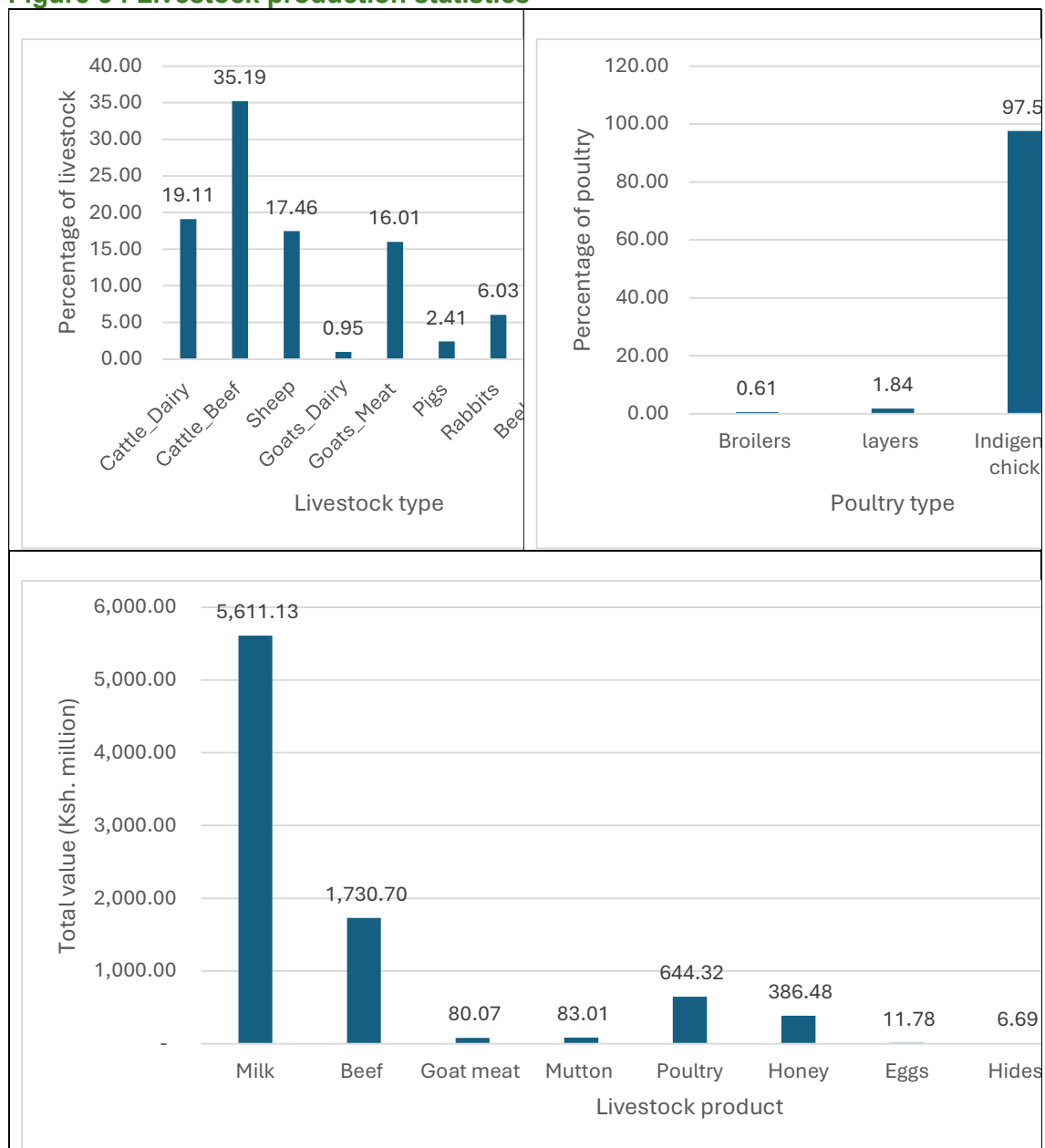


*Data source: National Information Platform for Food and Nutrition (NIPFN)*

Livestock production in Bungoma County is on a smaller scale compared to crop production. The most common type of livestock in the county are dairy cattle, beef cattle and sheep (Figure 5). Poultry production is also significantly high in the county with the

most common type being indigenous chicken. Milk has the highest total value in the county. Beef and poultry meat also have relatively higher values.
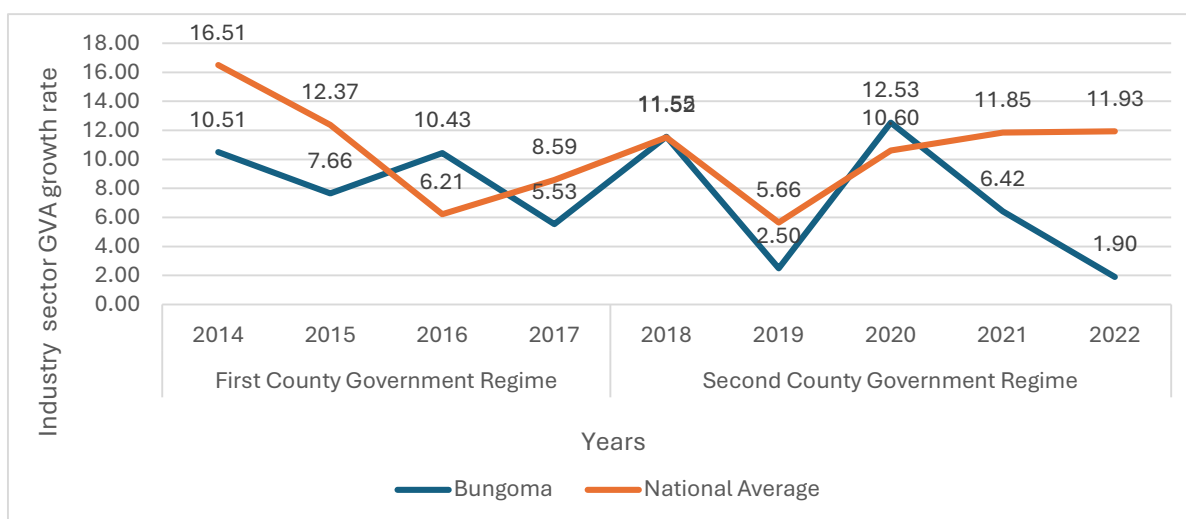
**Figure 5 : Livestock production statistics**



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

## Industry Sector

The average growth rate of the industry sector is 7.67 per cent, which is below the national average of 10.58 per cent (Figure 6).
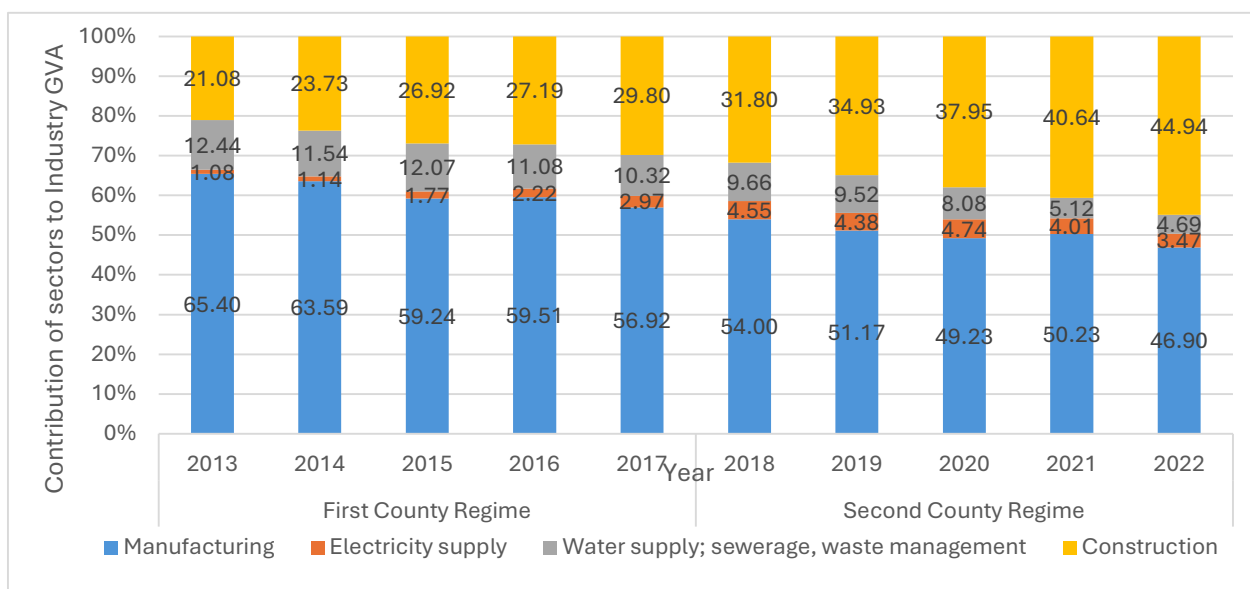
**Figure 6 : Bungoma County industry GVA growth rate**



*Data Source: KNBS 2023-Gross County Product*

Manufacturing dominates the industry sector GVA. Despite this, the share of manufacturing in industry GVA has been declining as that of the construction sector expands (Figure 7).

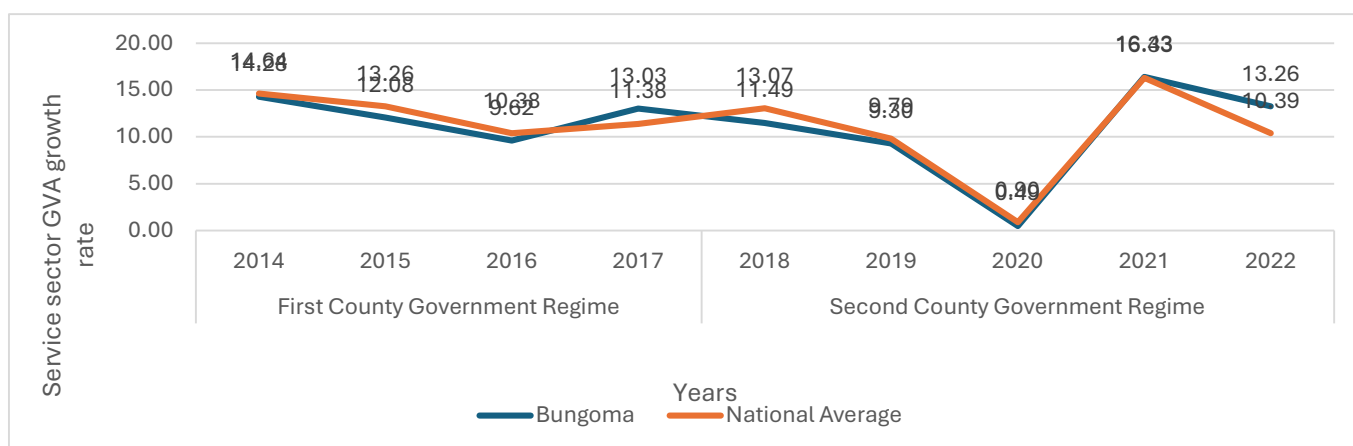**Figure 7: Contribution of industry sub-sectors to the industry sector GVA**



*Data Source: KNBS 2023-Gross County Product*

**Services Sector**

The average growth rate of service sector is 10.26 per cent, which is below the national average of 10.39 per cent (Figure 8).

## Figure 7 : Bungoma County services sector GVA growth rate



Data Source: KNBS 2023-Gross County Product

The transportation and storage services dominate the services sector, with the highest contribution to services GVA at an average of 23.05 per cent over the period under study (Figure 9). The education sector is the second highest contributor to services GVA at an average of 18.82 per cent. The public and administration sector is the third at an average of 15.80 per cent. The county has tourism potential despite that accommodation and food services contributes 4-5 per cent to services GVA.

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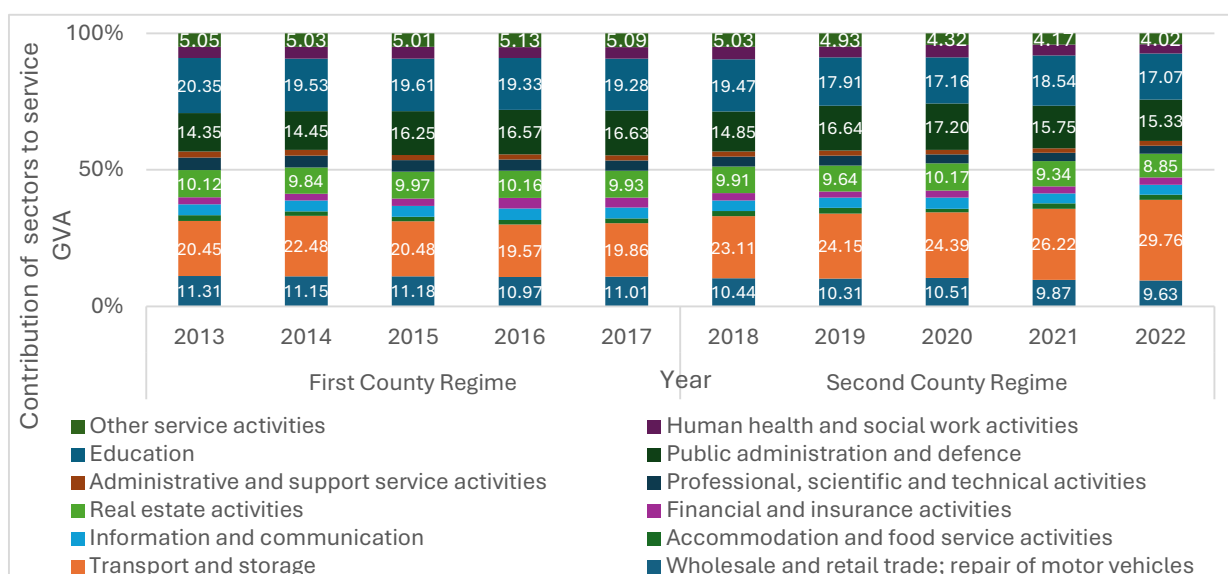


Data Source: KNBS 2023-Gross County Product

## Quantity and Quality of Labour Force in Bungoma County

Bungoma County has a total of 870,964 working-age population, which is about 52.14 per cent of the total county population. Most of the working-age population is youthful (18-34 years) at 48.77 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 | 71,975 | 71,088 | 143,063 | 16.43 |
| 18 –34 | 199,049 | 225,691 | 424,740 | 48.77 |
| 35-64 | 146,312 | 156,849 | 303,161 | 34.81 |
| Total | 417,336 | 453,628 | 870,964 | |

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

Most of the population in Bungoma sub-counties are persons in the working age categories. Bungoma South has the highest percentage of persons of working age at 54.94 per cent. In all the sub-counties of Bungoma County, the youthful, 18-34 years, are the majority with Mt Elgon Forest, Bungoma South, and Cheptais have the highest youthful working-age population (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 –34 | 35-64 | |
| Bumula | 215,891 | 19,317 (17.74) | 52,297 (48.04) | 37,255 (34.22) | 108,869 (50.43) |
| Bungoma Central | 177,740 | 15,411 (16.59) | 44,961 (48.40) | 32,514 (35.00) | 92,886 (52.26) |
| Bungoma East | 114,546 | 10,111 (16.75) | 28,306 (46.88) | 21,963 (36.37) | 60,380 (52.71) |
| Bungoma North | 121,316 | 11,040 (17.41) | 29,170 (46.00) | 23,209 (36.60) | 63,419 (52.28) |
| Bungoma South | 287,760 | 22,548 (14.26) | 82,639 (52.28) | 52,896 (33.46) | 158,083 (54.94) |
| Cheptais | 136,029 | 11,212 (17.27) | 32,940 (50.73) | 20,785 (32.01) | 64,937 (47.74) |
| Kimilili | 162,035 | 14,092 (16.56) | 40,167 (47.21) | 30,814 (36.22) | 85,073 (52.50) |
| Mt. Elgon | 78,870 | 6,981 (17.64) | 19,329 (48.84) | 13,267 (33.52) | 39,577 (50.18) |
| Bungoma West | 119,874 | 10,167 (16.93) | 28,291 (47.12) | 21,580 (35.94) | 60,038 (50.08) |
| Tongaren | 100,342 | 8,730 (16.74) | 23,338 (44.76) | 20073 (38.50) | 52,141 (51.96) |
| Webuye West | 152,511 | 13,203 (16.56) | 38,250 (47.96) | 28,293 (35.48) | 79,746 (52.29) |
| Mt. Elgon Forest | 3,621 | 251 (14.83) | 930 (54.93) | 512 (30.24) | 1,693 (46.76) |

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

Bungoma County has high performance in socio-economic indicators that affect the quality of labour. However, there is a need for interventions to reduce stunting, percentage of teenage pregnancies and child poverty (Table 3).

**Table 3: Human capital indicators**

| Human capital indicators | County | National average |
|---|---|---|
| Literacy rate | 88.00 | 78.41 |
| Pre-primary net enrolment rate (2019) | 68.91 | 67.51 |
| Primary school net enrolment rate (2020) | 86.70 | 77.72 |
| Secondary school net enrolment rate (2020) | 62.20 | 54.18 |
| Average years of schooling (2014) | 7.30 | 7.78 |
| Percentage of children 12 -23 months fully vaccinated (%) | 75.90 | 74.97 |
| Percentage of stunted children | 19.00 | 19.75 |
| Percentage of teenage pregnancy | 18.60 | 15.79 |
| Primary to secondary transition rates (2020) | 87.40 | 86.13 |
| Pupil teacher ratio (Primary school) | 34.00 | 28.28 |
| Food poverty head count (%) | 31.00 | 33.63 |
| Child poverty head count (%) | 44.60 | 42.67 |

*Source: KDHS 2022, KPHC 2019, Basic Education Statistical Booklet, 2019*

Most of the essential infrastructure and capital indicators in Bungoma County are above the national average. However, interventions are required to increase access to electricity, Internet connectivity at the household level and in schools, improved water, housing quality and financial inclusion (Table 4).

**Table 4: Essential infrastructure and capital indicators**

| Essential infrastructure indicators | County | National average |
|---|---|---|
| Percentage of households with access to electricity (2019 Census | 21.60 | 38.52 |
| Distribution of population using the Internet (2019 census) | 13.80 | 18.69 |
| Rural Access Index (2018) | 82.05 | 63.72 |
| Access to improved sanitation (2018) | 39.00 | 59.04 |
| Access to improved water (2018) | 75.70 | 65.33 |
| Financial inclusion level (2021) | 73.90 | 81.01 |
| The proportion of primary schools with Internet | 24.65 | 27.65 |
| Proportion of secondary schools with functional internet | 27.30 | 35.13 |
| Percentage of households by housing material composite-finished materials(adequate) (2019) | 24.12 | 51.71 |
| Percentage of households using bank usage (overall) | 44.50 | 38.18 |
| Percentage of households using mobile money | 71.40 | 78.58 |

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

## County Employment Statistics

The employment-to-population ratio in Bungoma County is at 63.56 per cent. Most of those working are 35-64 years at about 31.10 per cent while those aged 18-34 years are at 30.95 per cent. The percentage of the employed by gender is 35.88 per cent for males and 39.40 per cent for females. The unemployment rate is at 4.55 per cent with

unemployment being slightly lower for the youth (18-34 years) at 2.94 per cent and those between 35-64 years at 1.48 per cent. The percentage of persons working aged of 5-14 years and 15-17 years working is 3.93 per cent and 2.09 per cent. The inactivity rate for the youth (15-24) is at 26.77 per cent as most are pursuing education while that of the prime age (25-64 years) is at 4.52 per cent as shown in Table 5.

**Table 2: Bungoma County employment statistics**

| Employment statistics | Youth | Non youth |
|---|---|---|
| Employment to population ratio (%) | 30.95 | 31.10 |
| Unemployment rate | 2.94 | 1.48 |
| Percentage of persons 5–17 years old working | 6.02 | - |
| Inactivity rate | 26.77 | 4.52 |

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

### Sectoral Employment

The agriculture sector has the highest share of employment at 61.94 per cent, the services sector is second at 31.49 per cent while the industry sector has the least at 6.57 per cent (Figure 10).

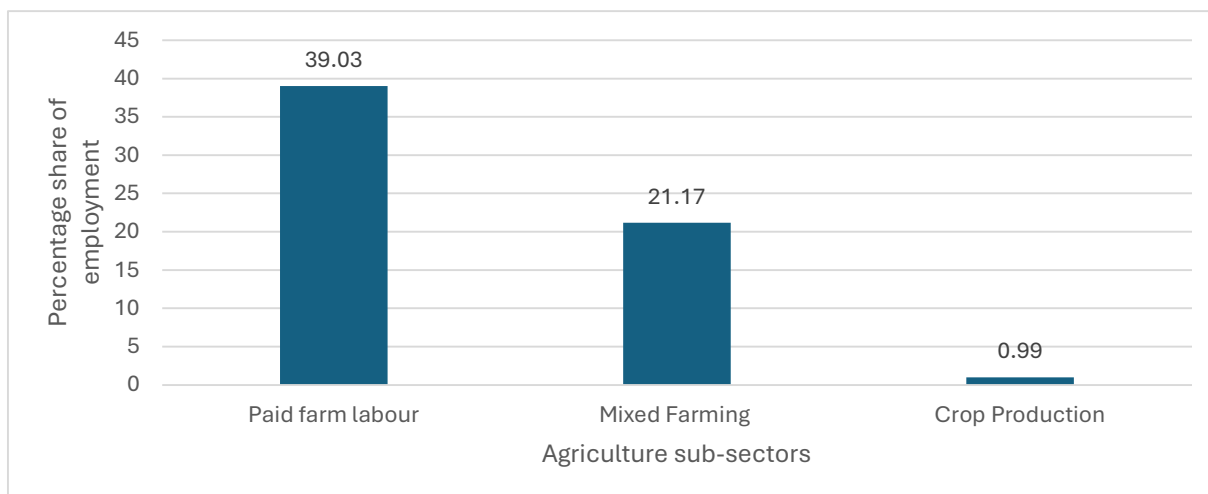### Figure 10: Percentage share of employment in the broad sectors
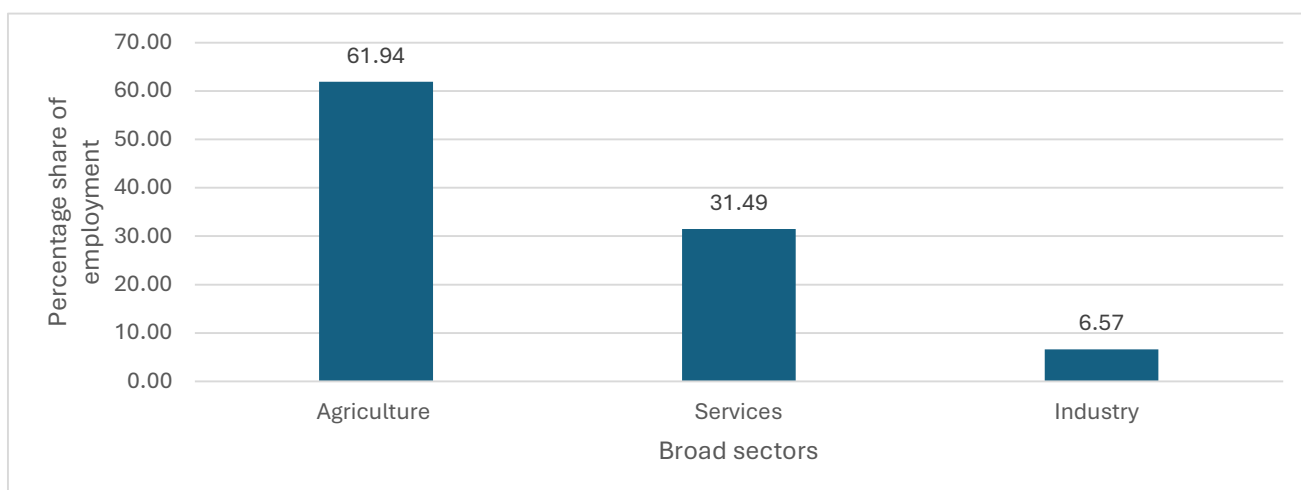


*Data Source: KNBS 2021- Kenya Continuous Household Survey*

### Agriculture Sector Employment

In the agriculture sector, the majority are those working as paid farm labourers (Figure 11).

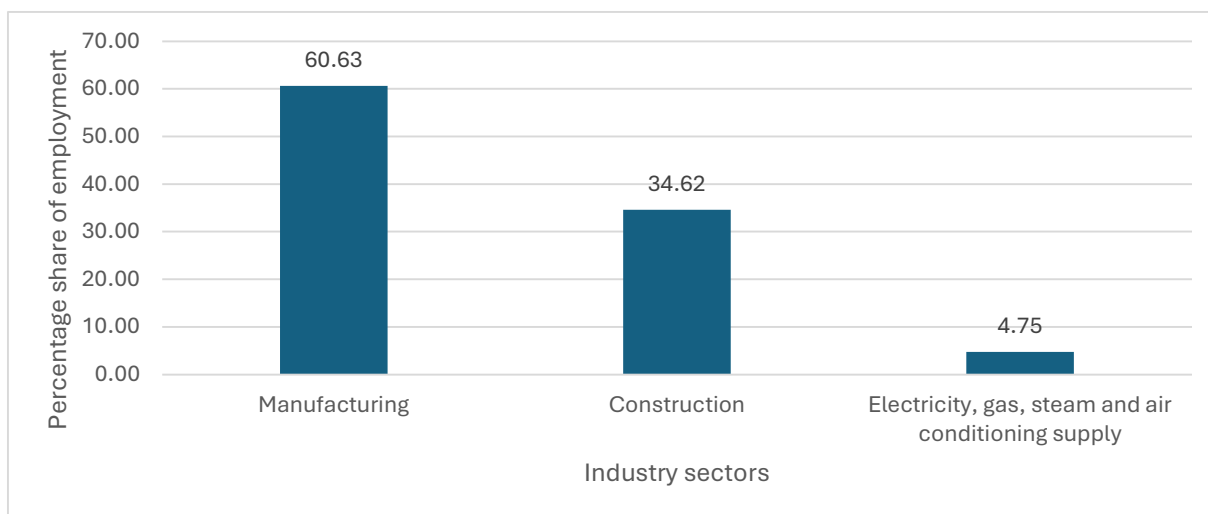**Figure 11: Percentage of persons employed in agriculture sub-sectors**



*Data Source: KNBS 2021- Kenya Continuous Household Survey*

**Industry Sector employment**

The majority of those working in the industry sectors are in the manufacturing sector (Figure 12).
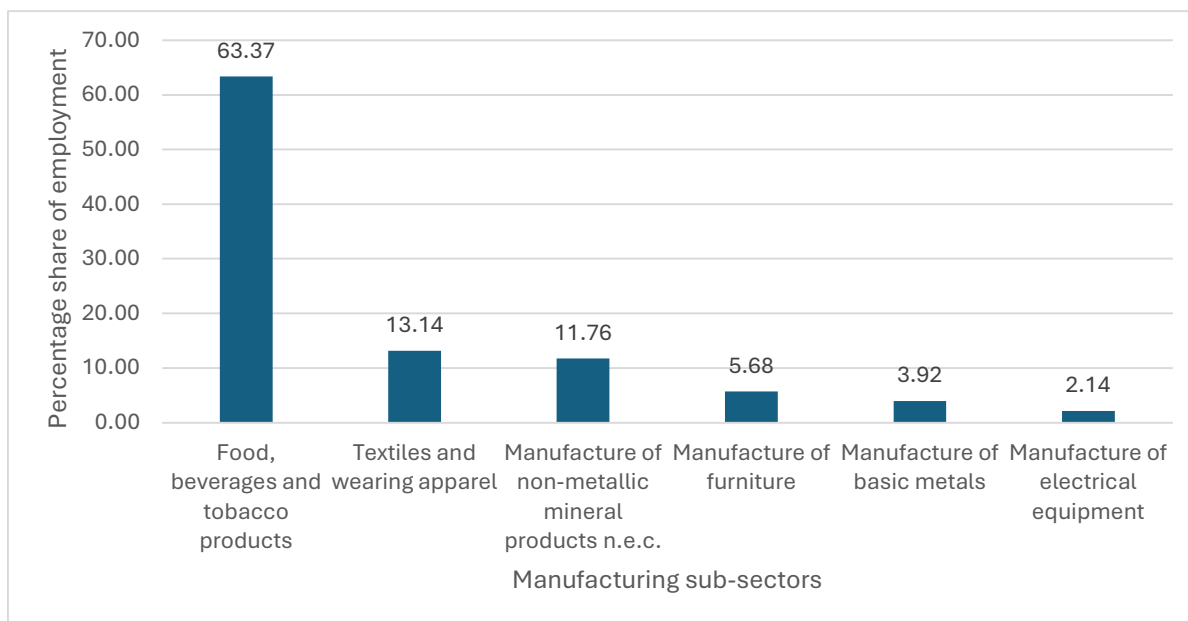
**Figure 12: Percentage of persons employed in the industry sectors**



*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 manufacture of food products and textile and wearing apparel industries (Figure 13).

**Figure 13: Percentage of persons employed in manufacturing sub-sectors**



*Data Source: KNBS 2021- Kenya Continuous Household Survey*

**Services Sector Employment**

Majority of those working in the services sector are in wholesale and retail trade, followed by the transportation and storage sub-sector (Figure 14).
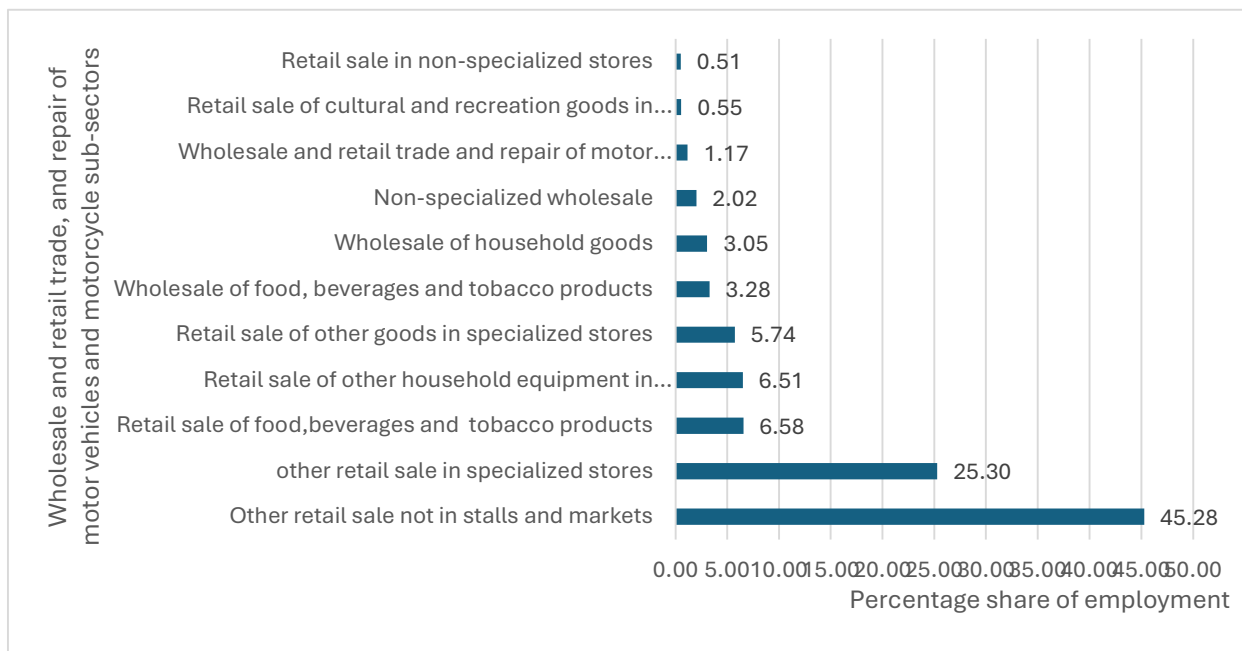
**Figure 14: Percentage of persons employed in the services sector**
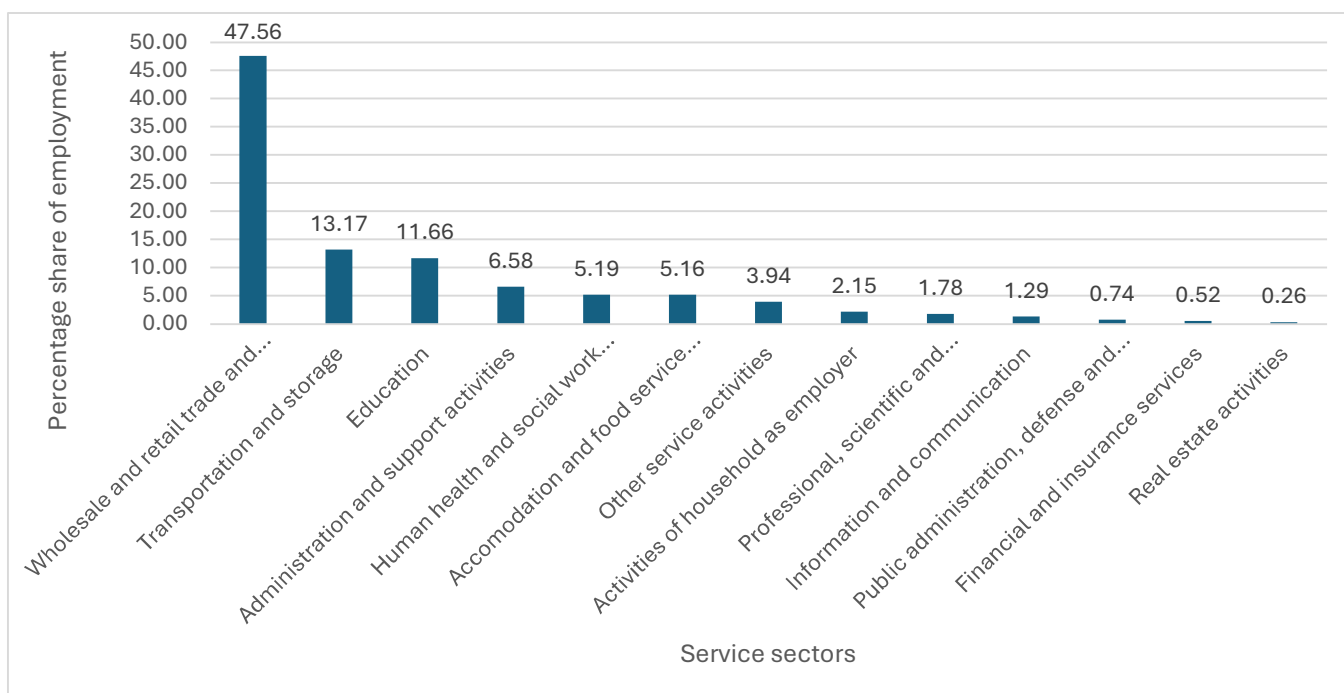


*Data Source: KNBS 2021- Kenya Continuous Household Survey*

In the wholesale and retail trade and repair of motor vehicles and motorcycles, the majority work is in other retail and not in stalls, stores or markets (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 sector, the majority of those employed are in other passenger land transport (Figure 16).

**Figure 16: Percentage of persons employed in the transportation and storage sub-sectors**
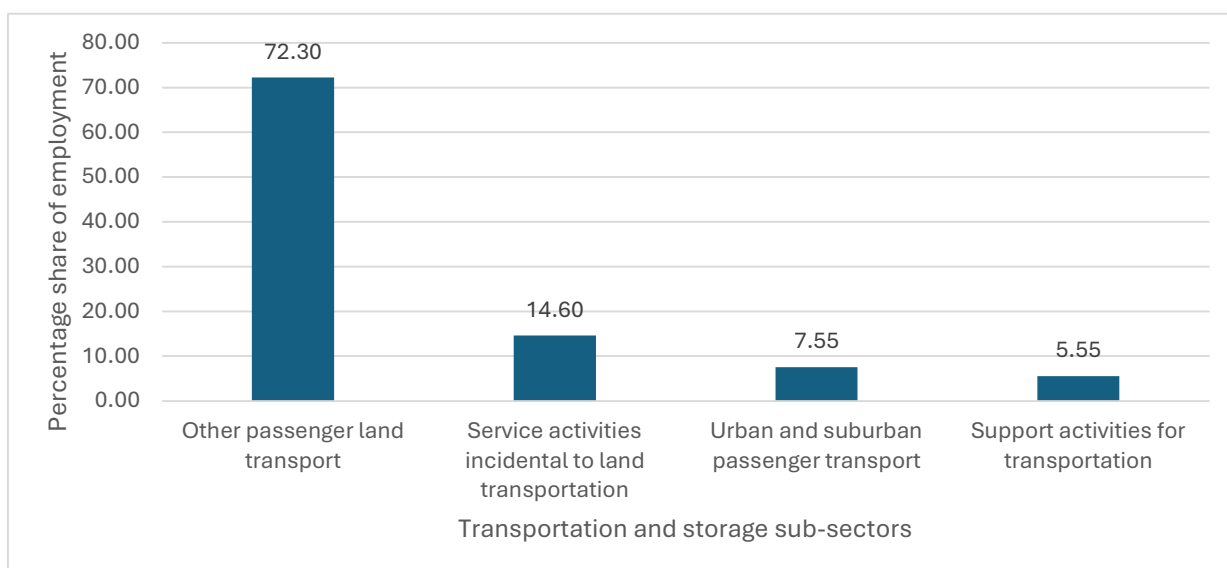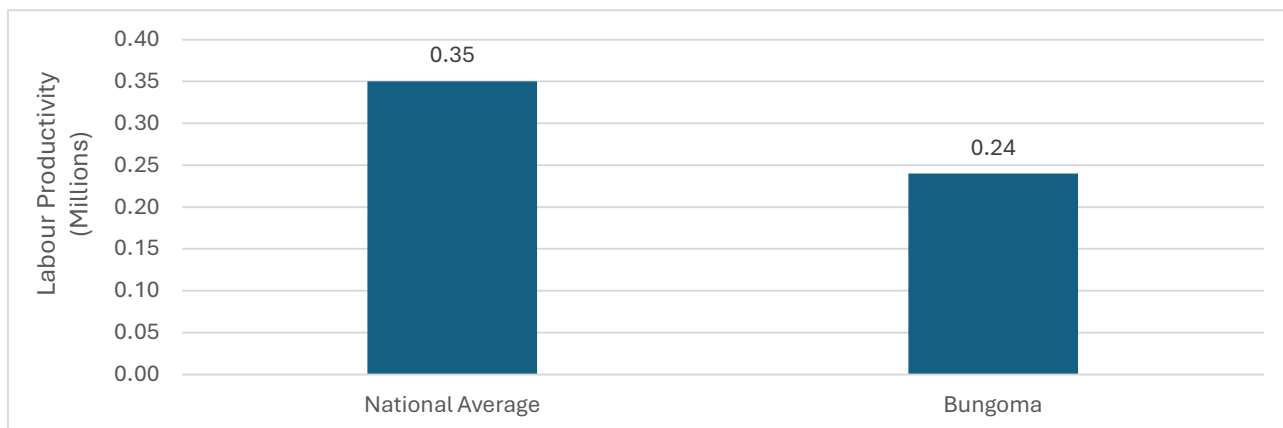


*Data Source: KNBS 2021- Kenya Continuous Household Survey*

## Labour Productivity

Labour productivity[1] for Bungoma County is lower than the national average (Figure 17).
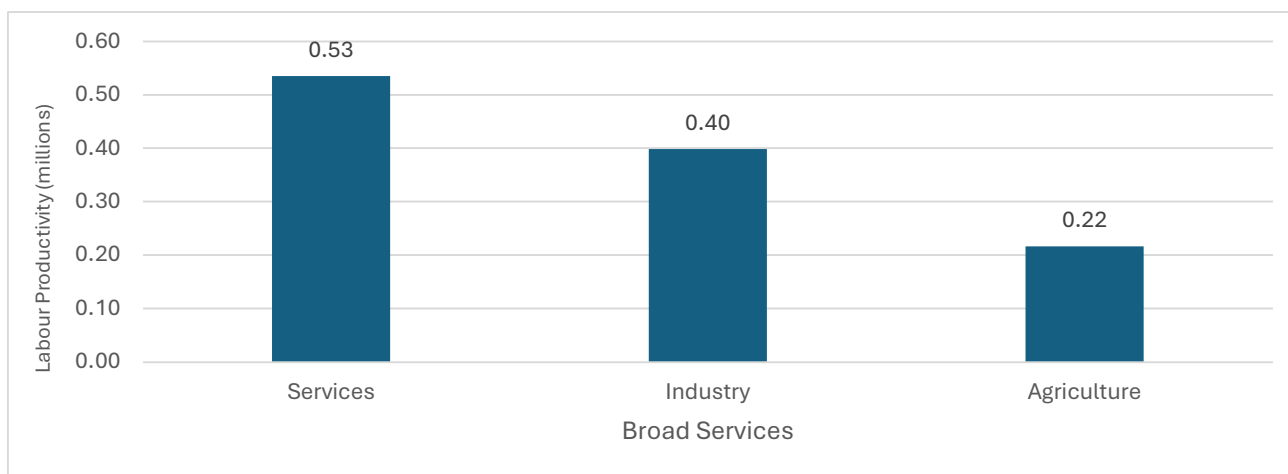
**Figure 17: Labour productivity ratios (millions)**



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

In Bungoma County, the services sector has the highest labour productivity followed by the industry sector while the agriculture sector has the lowest (Figure 18).
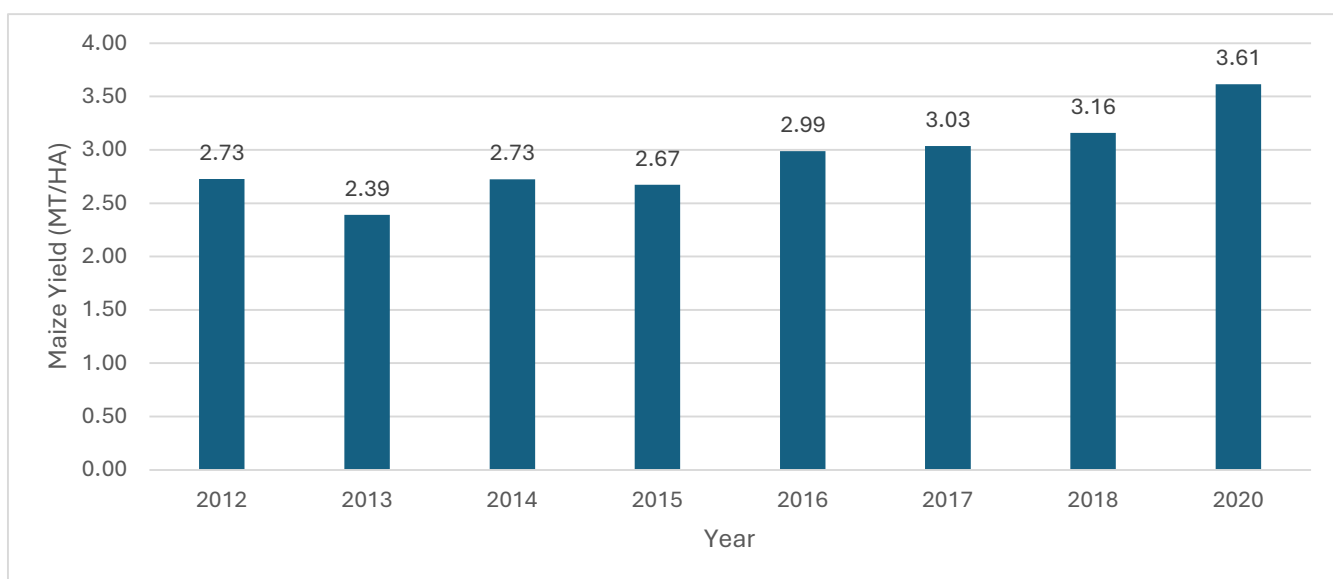
**Figure 18: Labour productivity by sectors**



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

## Agriculture Sector Productivity

In the agriculture sector, maize productivity is comparatively higher in Bungoma County and has also increased over the years. The average yields are 2.94 MT/HA with the highest being in 2020 (Figure 19).

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[1]The measure used is the apparent labour productivity measured as gross value added per person employed.
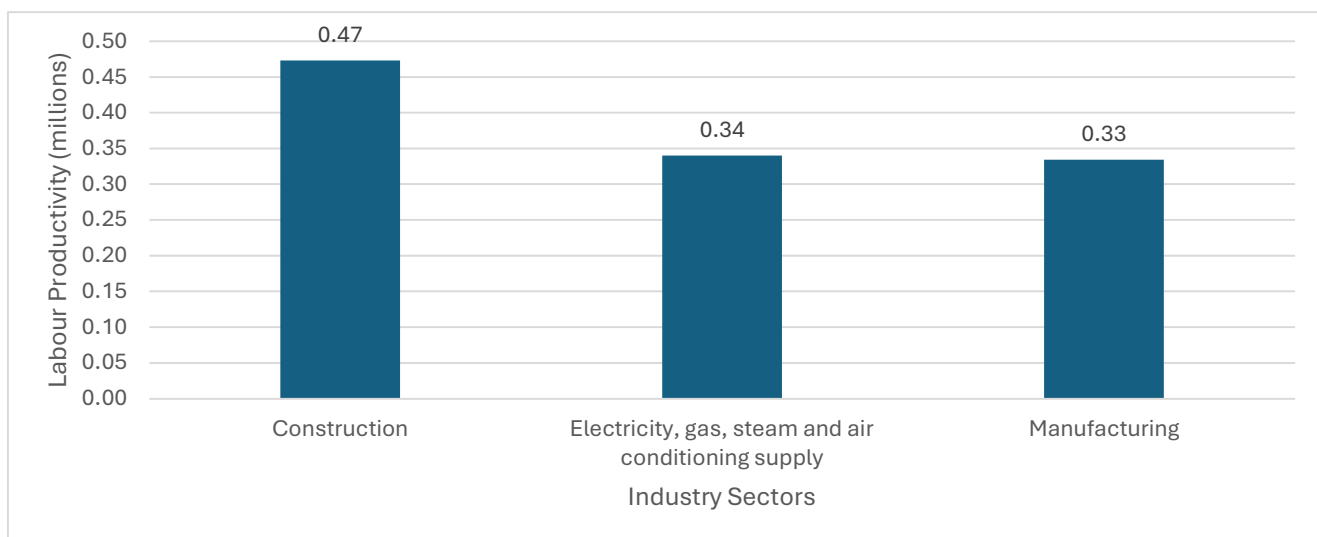
**Figure 19: Maize yield (MT/HA)**



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

## Industry Sector Labour Productivity

Construction and electricity, gas, steam and air conditioning supply sub-sectors had the highest labour productivity in the industry sector (Figure 20).

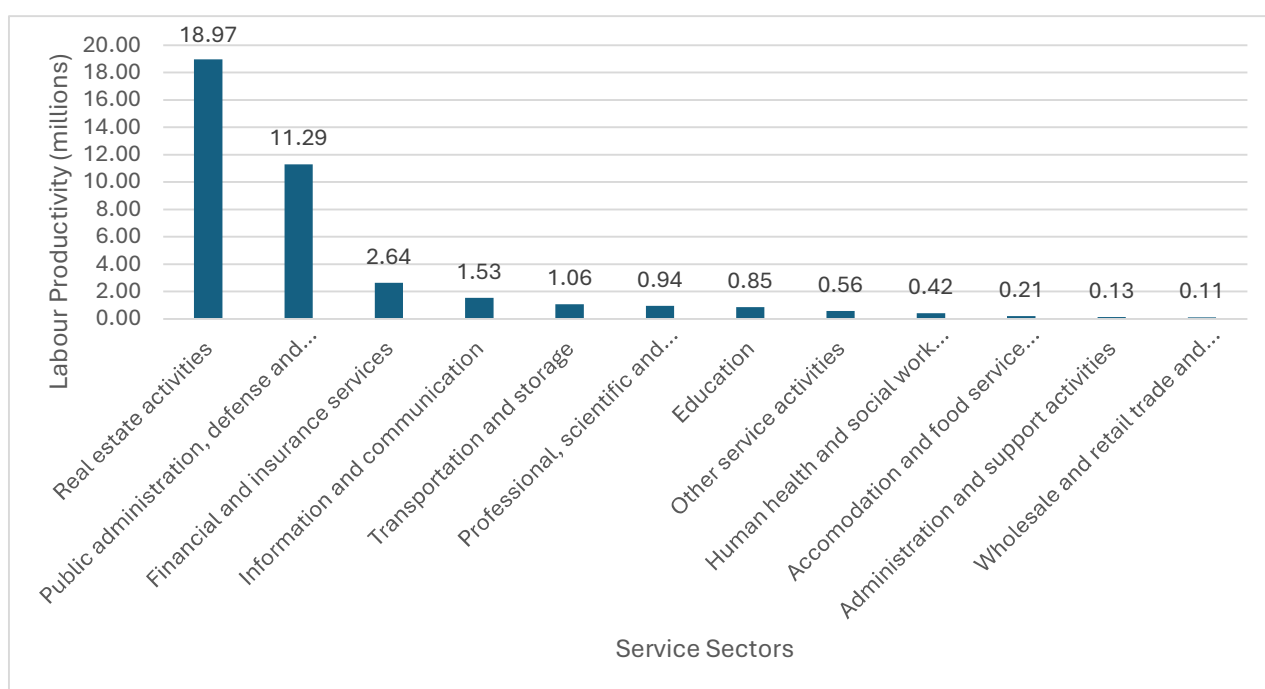**Figure 20: Labour productivity by industry sub-sectors**



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

## Services Sector Labour Productivity

The real estate sub-sector relatively higher labour productivity compared with other sub-sectors within the services 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 services sector has the highest share of county GVA, with transportation and storage services dominating the sector. The agriculture sector share is equally high characterized by mixed farming and crop production farming systems. The county has high potentials in maize production, dairy and poultry values chain. The industry sector has the smallest share and although manufacturing dominates the sector, its share has been declining as that of the construction sector expands.

(ii)   The indicators of quality of labour are within the national average. However, there is a need for interventions to reduce stunting, percentage of teenage pregnancies and child poverty. In addition, increasing enrolment in secondary school and immunization of children needs to be prioritized.

(iii)  The essential infrastructure and capital indicators in the county are within the national average. However, interventions are required to increase access to electricity, Internet connectivity at the household level and in schools, improved water, housing quality and financial inclusion.

(iv)   The agriculture sector has the highest share of employment while the industry sector has the least. In agriculture, the majority are those working as paid farm labourers. The majority of those working in the industry sectors are in manufacturing with employment concentrated in manufacture of food products and textile and wearing apparel industries. Majority of those working in the

service sector are in wholesale and retail trade, with the majority working in other retail not in stalls, stores or markets.

(v) Labour productivity in the county is lower than the national average. The services sector has the highest labour productivity followed by the industry sector while the agriculture sector has the lowest. Construction has the highest labour productivity in the industry sector, and the real estate has the highest in the services sector. There is potential to enhance crop production including maize yield.

## Policy Recommendations

(i) Enhance maize production by supporting the farmers with extension services, input subsidies, and prompt responses to pests and diseases. Further, support livestock production by enhancing integration into the dairy and leather value chain. This can be achieved through facilitating farmers to form milk co-operative societies and investing in milk processing, acquiring improved breeds, and enhancing fodder and feed production. The poultry value chain also needs to be enhanced.

(ii) Encourage investments in manufacturing to support the transformation of the agriculture sector through agro-processing and textile industry. This includes supporting the County Aggregation Industry Park to enhance the productivity of the MSMEs.

(iii) Secure quality of labour with nutrition sensitive social protection programmes that would target both child poverty and stunting. Further, reduce teenage pregnancies by creating awareness and supporting teenage mothers to continue with education.

(iv) Create an enabling environment for private sector growth by investing in essential infrastructure to improve access to electricity and Internet. Increasing financial inclusion and access to basic amenities such as improved water should also be prioritized.

(v) Diversify the services sector by exploiting tourism sector in the county. This can be achieved through marketing the tourism sites and encouraging investments in hotels improve quality of accommodation.

**Acknowledgement**

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