



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Nairobi County

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Overview of the County

Nairobi City County hosts the capital and largest city in Kenya. The city and its surrounding area form the Nairobi County. The county is a non-ASAL experiencing less than 10 per cent aridity. The county land size stands at 696.1 km² and has eleven Sub-Counties namely: Dagoretti, Embakasi, Kamukunji, Kasarani, Kibra, Lang'ata, Makadara, Mathare, Njiru, Starehe, and Westlands.

Key Highlights

The productivity of Nairobi County is characterized by the following:

- (i) The services sector has the highest share of county Gross Value Added (GVA). The industry sector is almost stagnating and manufacturing is declining. The financial and insurance activities dominate the service sector.
- (ii) The quality of labour requires interventions to increase primary and secondary school enrolment and immunization and reduce stunting.
- (iii) The essential infrastructure requires interventions to increase access to improved sanitation and the internet.
- (iv) The services sector is the highest employer many of whom are in wholesale and retail trade concentrated in in retail of other goods in specialized stores. In manufacturing, employment is concentrated in the manufacture of textiles and wearing apparel, and the manufacture of food products.
- (v) Labour productivity is highest in the service sector while the agriculture sector has the lowest labour productivity. Electricity, gas, steam, and air conditioning supply has the highest labour productivity in the industry sector while real estate has relatively higher labour productivity in the services sector.

To enhance productivity, there is a need to:

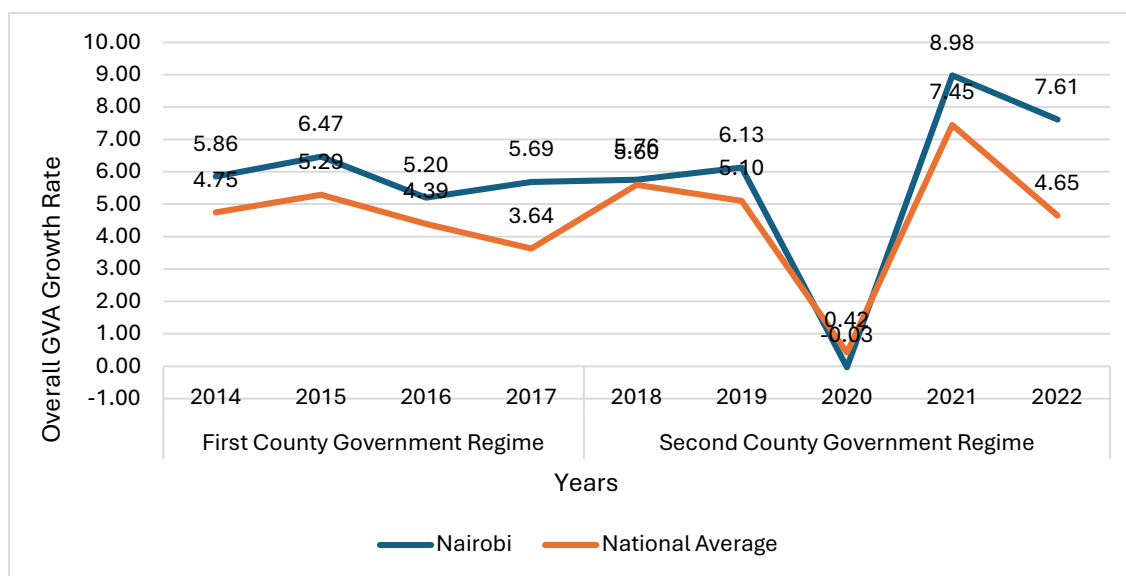
- (i) Promote urban and peri-urban farming to support food production in the county.

- (ii) Create an enabling environment for private sector growth by investing in essential infrastructure.
- (iii) Secure the quality of the future labour force with nutritional programmes and emphasize on 100 per cent secondary school transition rates to enable the acquisition of skills.
- (iv) Support the informal manufacturing firms and start-ups through promoting innovation and digitization.
- (v) Market tourism sites in the city and encourage investment in conferencing facilities that attract international MICE.

Nairobi County Economic Performance

Nairobi County contributes on average 27.5 per cent of the National Gross Value added with an average GVA size of Ksh 2.087 trillion. The average GVA per capita for Nairobi County is Ksh 474,723.03 with an average population growth of 2.0 per cent and overall poverty levels at 16.5 per cent (Figure 1). Nairobi County has shown a steady growth in GVA with an average growth rate of 5.74 per cent in 2013-2022, which is higher than the national average growth of 4.37 percent.

Figure 1: Nairobi County GVA growth rate

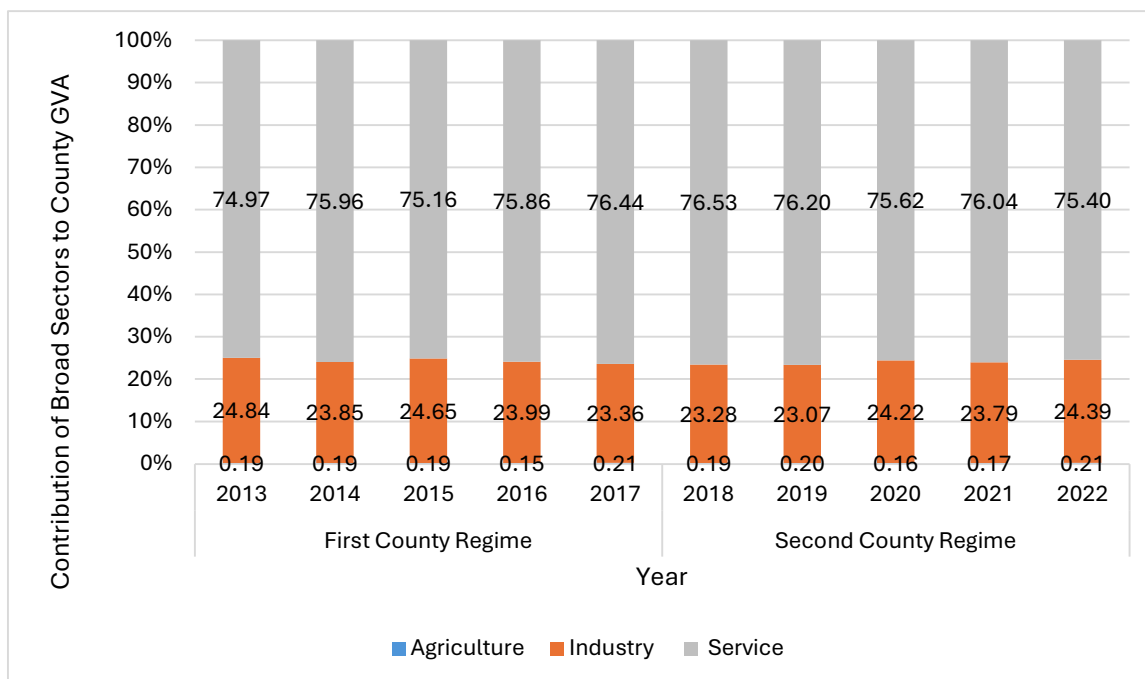


Data source: KNBS 2023-Gross County Product

Sectoral Analysis of GVA

The services sector is dominant in Nairobi County with an average contribution to GVA of 75.82 per cent. The industry sector is second, contributing an average of 23.94 per cent to the GVA while the agriculture sector contributes about 0.19 per cent (Figure 2).

Figure 2: Contribution of broad sectors to Nairobi County GVA

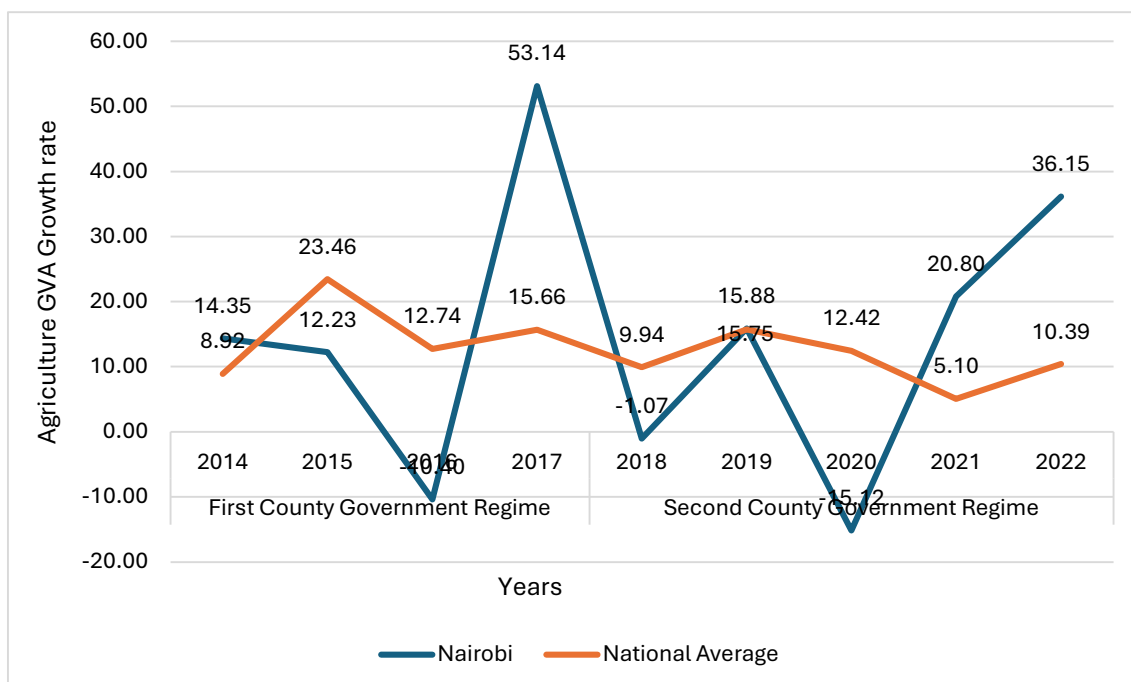


Data source: KNBS 2023-Gross County Product

Agriculture Sector

The average growth rate of agriculture GVA in 2013-2022 is 14.00 percent, which is above the national average of 12.71 per cent (Figure 3).

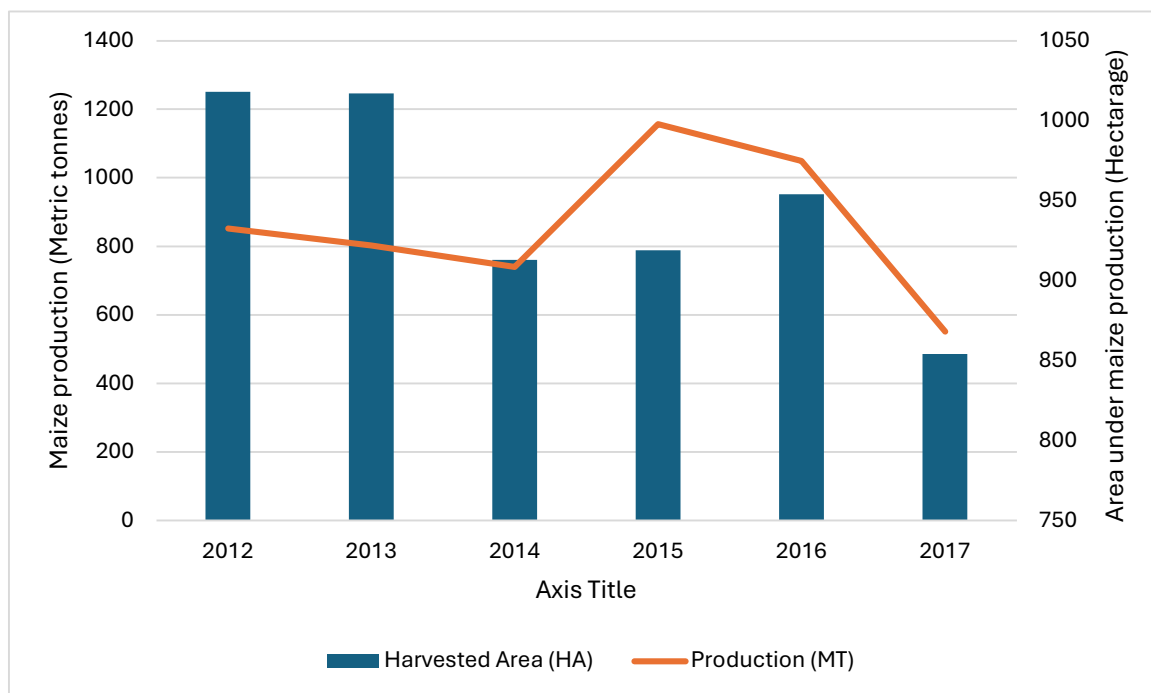
Figure 3: Nairobi County agriculture GVA growth rate



Data source: KNBS 2023-Gross County Product

The agriculture sector in Nairobi County is very small. Despite this, urban and peri-urban mixed farming is practiced. Common crops grown include maize, vegetables, and arrowroots among others. Additionally, flower/tree nurseries are also common. As expected, maize production is very low given the urban nature of the county. The area under maize production has been declining over the years while maize production has been fluctuating (Figure 4).

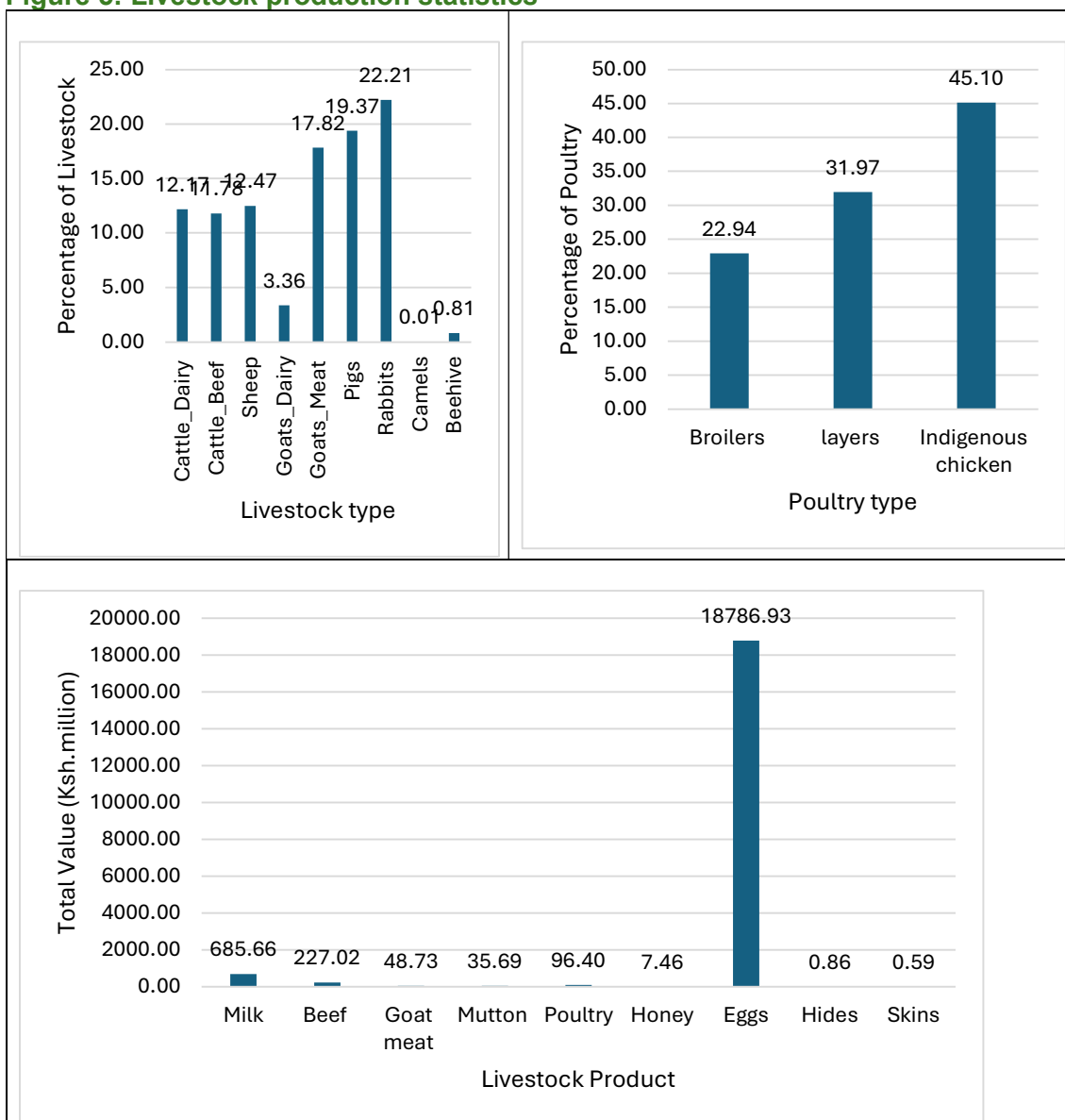
Figure 4: Maize production and area under maize production



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

Livestock production occurs at a very low scale, limited by space, with the most common livestock being the small stock such as rabbits, pigs and meat goat (Figure 5). Poultry farming is also common and is highly diversified. Eggs have the highest economic value among livestock products.

Figure 5: Livestock production statistics

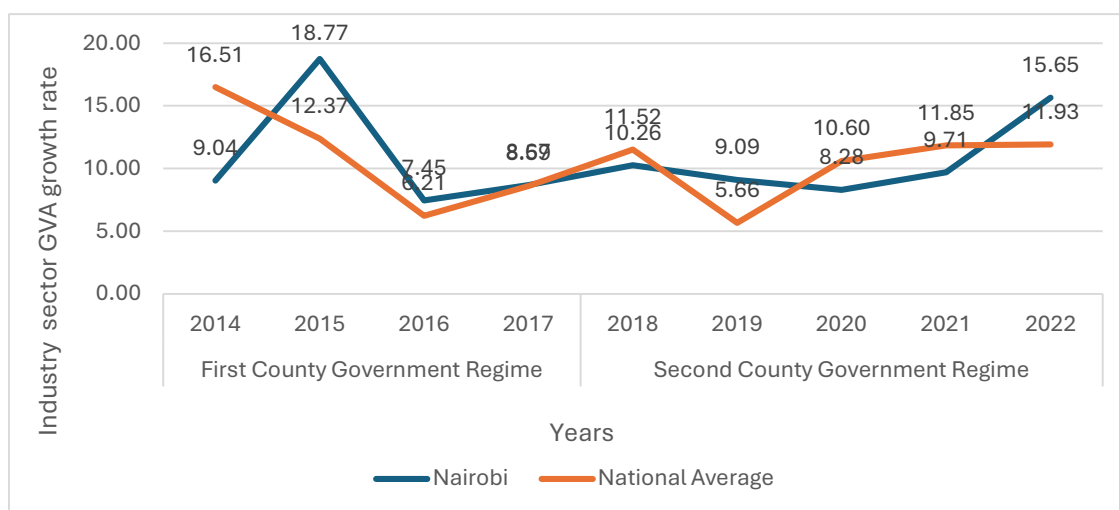


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Industry Sector

The average growth rate of the industry sector for Nairobi County is 10.77 per cent, which is slightly above the national average of 10.58 per cent (Figure 6).

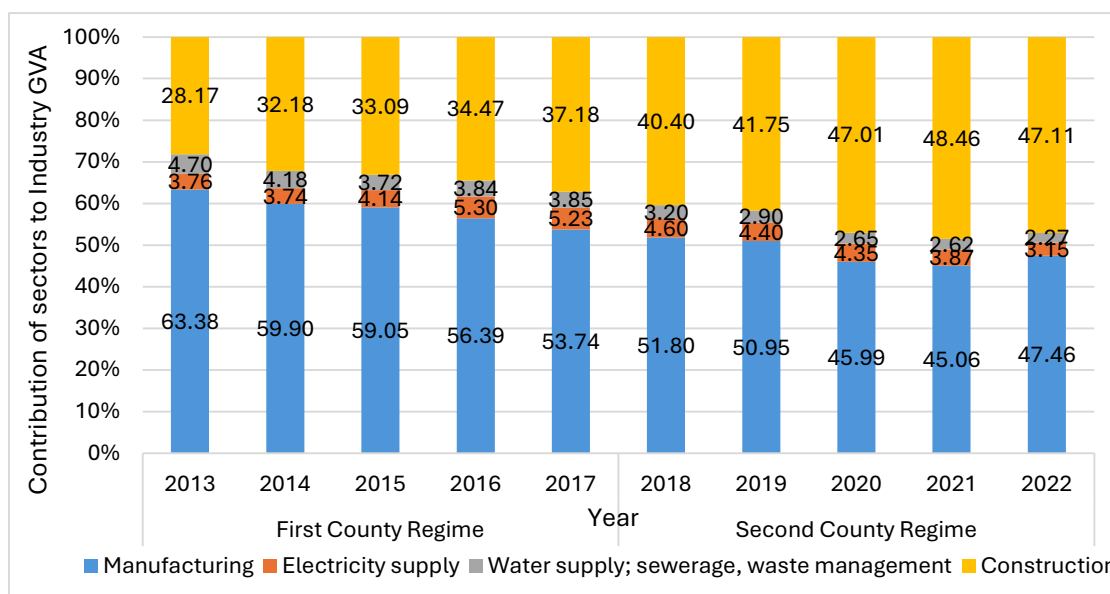
Figure 6: Nairobi County industry GVA growth rate



Data source: KNBS 2023-Gross County Product

Manufacturing and construction are other important sectors in Nairobi County as they dominate the industry sector as shown in Figure 7. The share of manufacturing has been declining over the years as that of the construction sector expands.

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

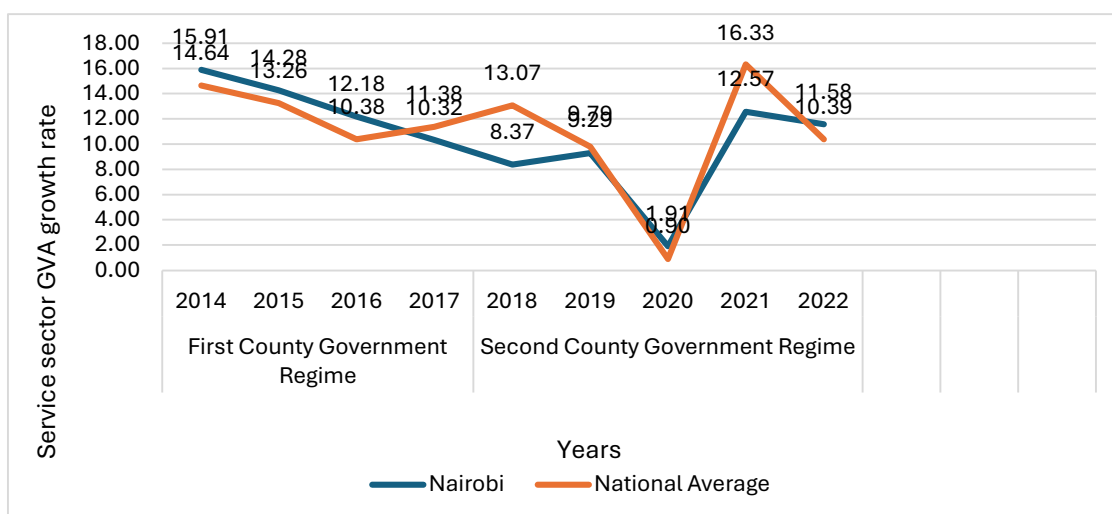


Data source: KNBS 2023-Gross County Product

Services Sector

The average growth rate of the services sector is 9.59 percent, which is below the national average of 11.13 per cent (Figure 8).

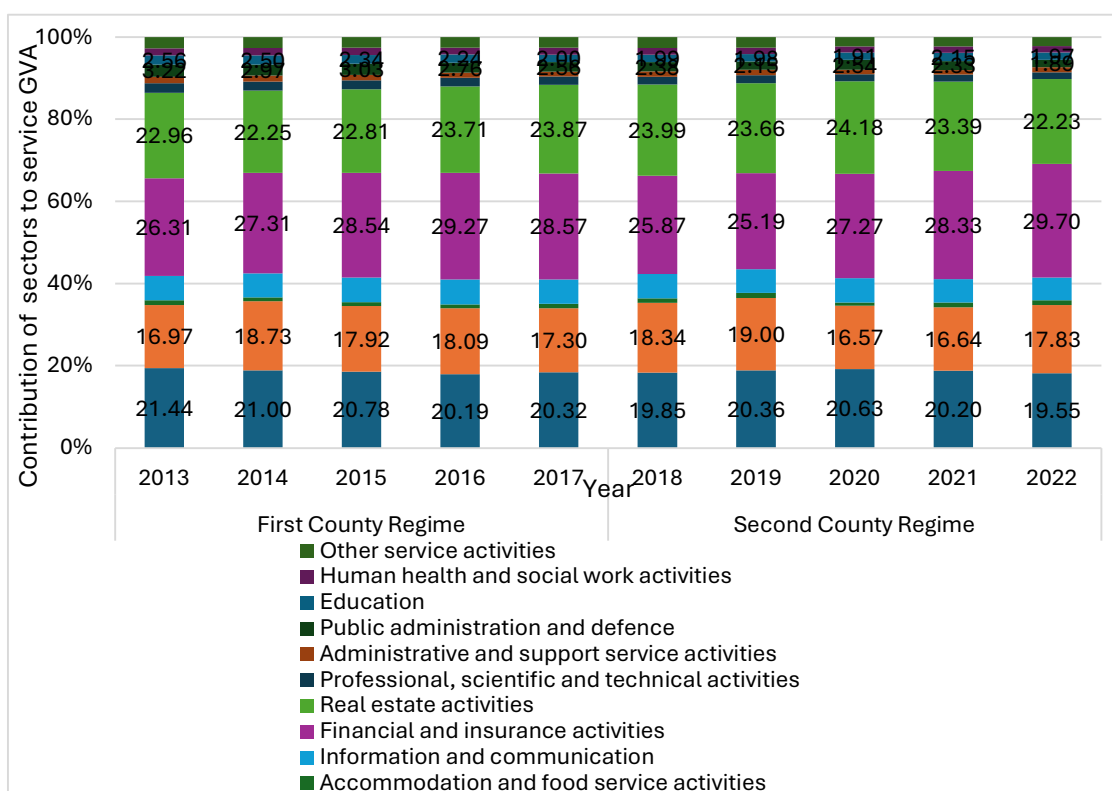
Figure 7 : Nairobi County services sector GVA growth rate



Data source: KNBS 2023-Gross County Product

The financial and insurance activities sector dominates the services sector with the highest contribution to service GVA at 27.64 percent. The real estate activities sub-sector is the second highest contributor to services GVA at 23.30 per cent (Figure 9). The wholesale and retail trade sub-sector is third at an average of 20.43 percent.

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



Data source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force in Nairobi County

Nairobi County has a total of 3,002,314 working-age population, which is about 68.28 per cent of the total county population (Table 1). Most of the working-age population is youthful (18-34 years) at 59.67 percent.

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	93,740	108,600	202,340	6.74
18 -24	314,892	397,640	712,532	23.73
25-34	532,179	546,839	1,079,018	35.94
35-64	557,655	450,769	1,008,424	33.59
Total	1,498,466	1,503,848	3,002,314	

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

Most of the population in Nairobi sub-counties are persons in the working age categories. Starehe sub-county has the highest percentage of working-age persons at 72.80 per cent (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	
Dagoretti	434,177	19,977 (6.81)	68,007 (23.20)	107,321 (36.60)	97,886 (33.39)	293,191 (67.53)
Embakasi	988,746	40,796 (6.02)	159,278 (23.50)	273,150 (40.30)	204,608 (30.19)	677,832 (68.55)
Kamukunji	268,269	14,382 (8.05)	48,155 (26.96)	61,207 (34.27)	54,865 (30.72)	178,609 (66.58)

Kasarani	780,619	35,229 (6.63)	128,487 (24.20)	201,745 (37.99)	165,560 (31.18)	531,021 (68.03)
Kibra	185,768	10,199 (8.13)	29,726 (23.69)	38,807 (30.93)	46,753 (37.26)	125,485 (67.55)
Lang'ata	197,472	9,361 (6.66)	32,056 (22.81)	42,023 (29.90)	57,089 (40.62)	140,529 (71.16)
Makadara	189,526	8,307 (6.21)	31,631 (23.64)	45,317 (33.88)	48,520 (36.27)	133,775 (70.58)
Mathare	206,550	9,804 (7.01)	35,779 (25.58)	49,074 (35.09)	45,198 (32.32)	139,855 (67.71)
Njiru	626,451	31,745 (7.73)	94,567 (23.03)	142,356 (34.67)	141,887 (34.56)	410,555 (65.54)
Starehe	210,411	9,612 (6.28)	41,676 (27.21)	50,834 (33.19)	51,057 (33.33)	153,179 (72.80)
Westlands	308,839	12,928 (5.92)	43,170 (19.78)	67,184 (30.78)	95,001 (43.52)	218,283 (70.68)

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

Nairobi County performed well in socioeconomic indicators that affect the quality of labour (Table 3). More interventions are however required to increase secondary school enrolment rates and reduce the stunting rates.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	87.60	78.41
Pre-primary net enrolment rate (2019)	85.35	67.51
Primary school net enrolment rate (2020)	61.80	77.72
Secondary school net enrolment rate (2020)	28.80	54.18
Average years of schooling (2014)	10.50	7.78
Percentage of children 12 -23 months fully vaccinated (%)	74.40	74.97

Percentage of stunted children	11.10	19.75
Percentage of teenage pregnancy	8.40	15.79
Primary to secondary transition rates (2020)	90.20	86.13
Pupil-teacher ratio (primary school)	22.00	28.28
Food poverty head count (%)	14.80	33.63
Child poverty head count (%)	15.40	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

Majority of the essential infrastructure and capital indicators that support the growth of county output in Nairobi County performed higher than the national average. However, interventions are required to increase access to improved sanitation (Table 4).

Table 4: Essential Infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census)	96.50	38.52
Distribution of population using the Internet (2019 census)	52.40	18.69
Rural Access Index (2018)	95.24	63.72
Access to improved sanitation (2018)	59.00	59.04
Access to improved water (2018)	97.10	65.33
Financial inclusion level (2021)	95.00	81.01
The proportion of primary schools with internet	63.85	27.65
Proportion of secondary schools with functional internet	65.80	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	95.52	51.71
Percentage of households using Bank usage (overall)	71.60	38.18

Percentage of households using mobile money	93.90	78.58
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Data sources: KRB 2018, KPHC 2019, FinAccess 2021, KIHBS 2015/16

County Employment Statistics

Employment to population ratio is at 59.25 percent. Most of those working is the youthful population 18-34 years at about 47.02 per cent while those 35-64 at 35.45 per cent (Table 5). The percentage of the employed by gender is 45.54 for male and 45.08 for female. The unemployment rate is at 13.96 per cent with unemployment being slightly higher for the youth (18-34 years) at 9.96 per cent and those between 35-64 years at 3.80 percent. The percentage of persons 5–17 years old working is 0.90 per cent indicating that the county has low levels of child labour.

Table 2: Nairobi County employment statistics

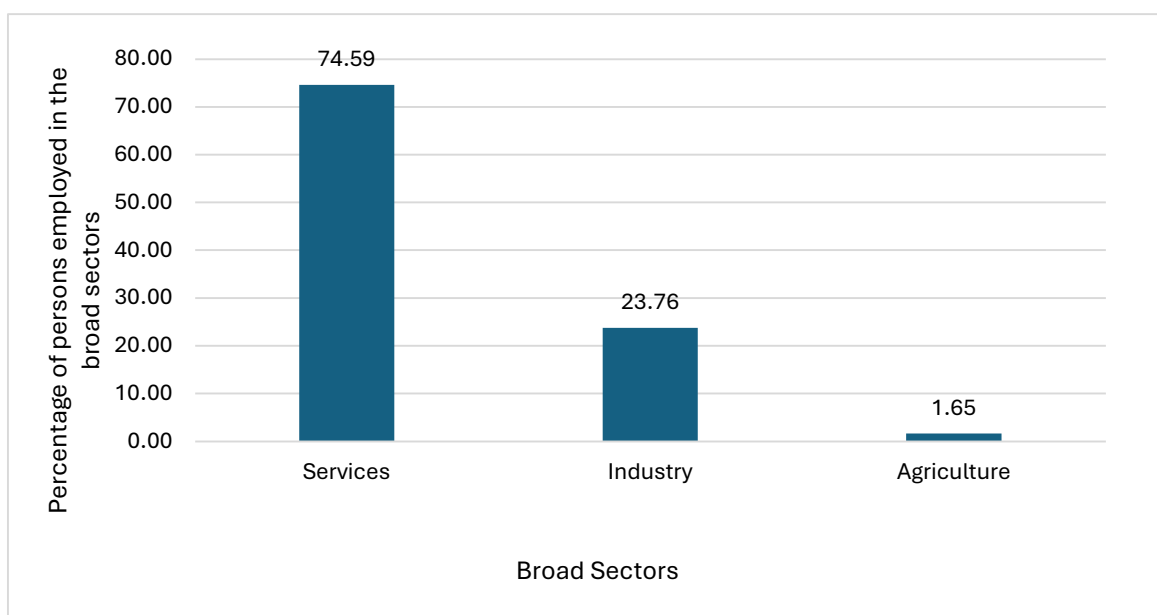
Employment statistics	Youth	Non-youth
Employment to population ratio (%)	47.02	35.45
Unemployment rate	9.96	3.80
Percentage of persons 5–17 years old working	0.90	-
Inactivity rate	16.11	8.98

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

Sectoral Employment

The services sector is the highest employer in Nairobi County at 74.59 per cent followed by the industry sector at 23.76 per cent (Figure 10). The agriculture sector is third at 1.65 percent.

Figure 10: Percentage of persons employed in the broad sectors

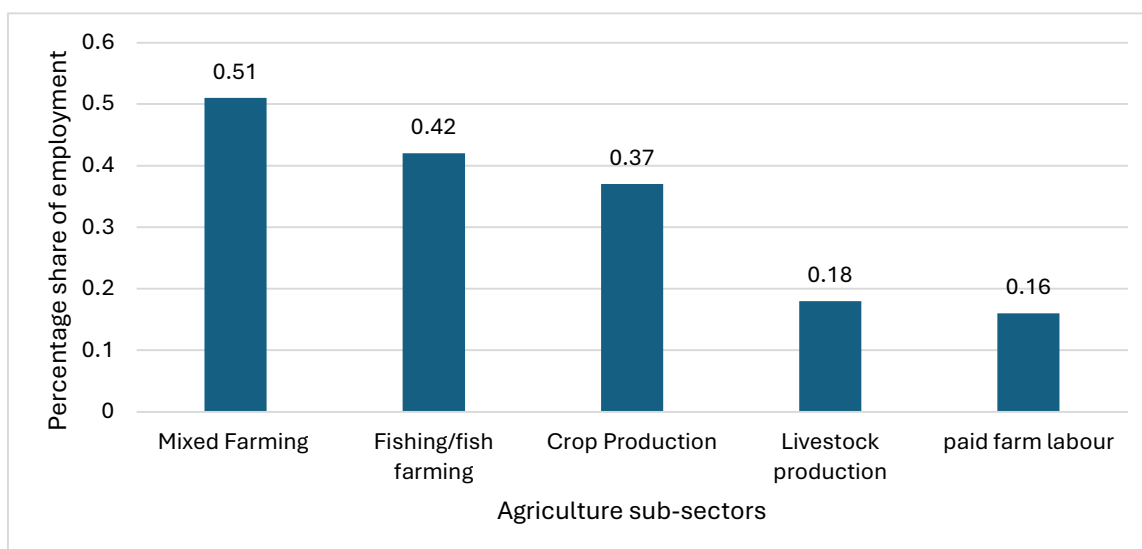


Data source: KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector

In agriculture, the majority are those practicing mixed farming (Figure 11).

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

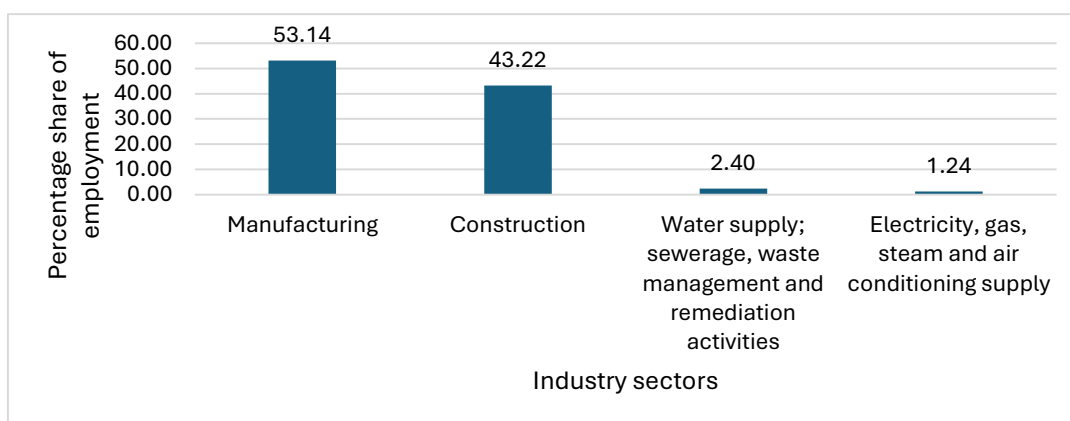


Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector

The manufacturing sector has the highest share of employment in the industry sector (Figure 12).

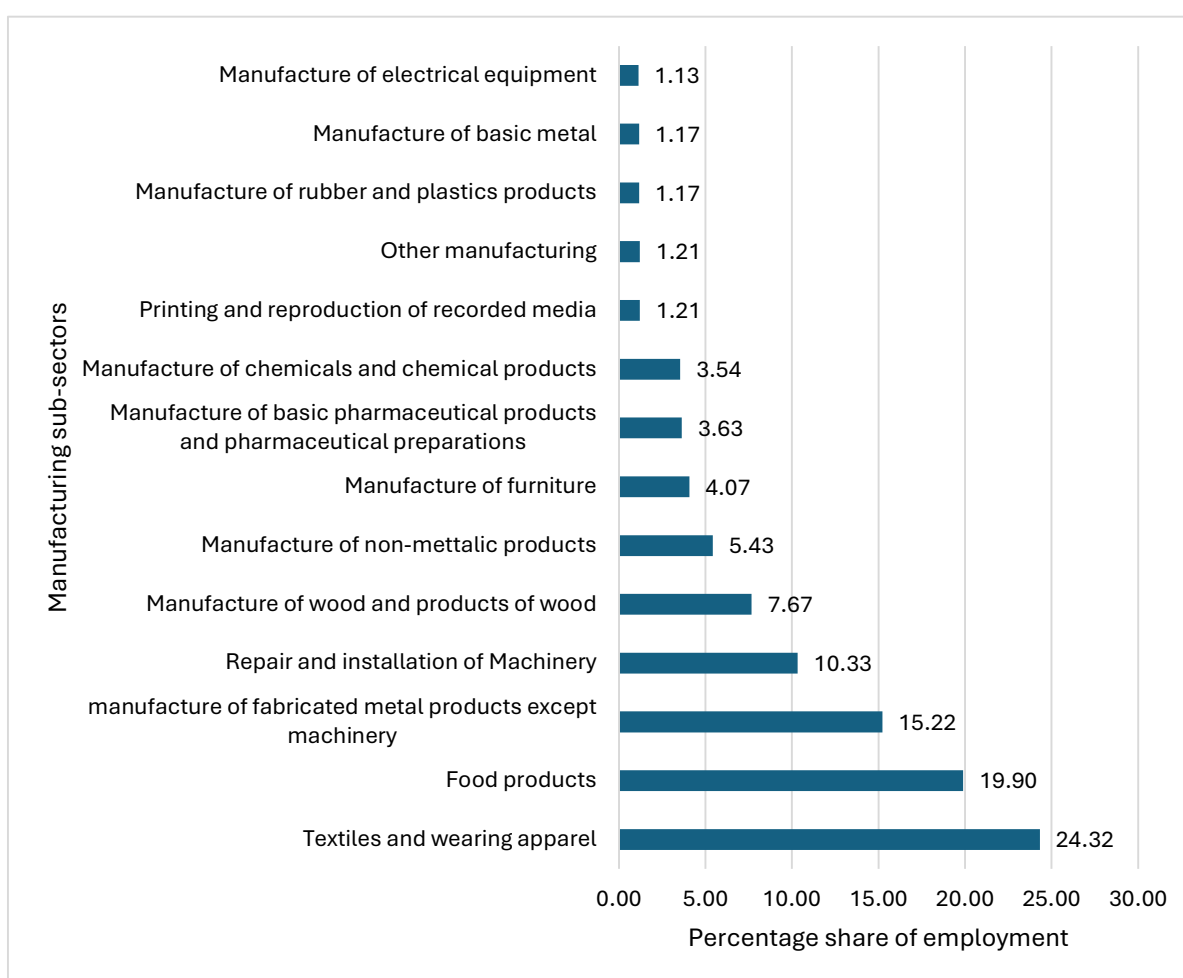
Figure 12: Percentage share of employment in the industry sectors



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 such as the manufacture of textiles and wearing apparel and the manufacture of food products (Figure 13).

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

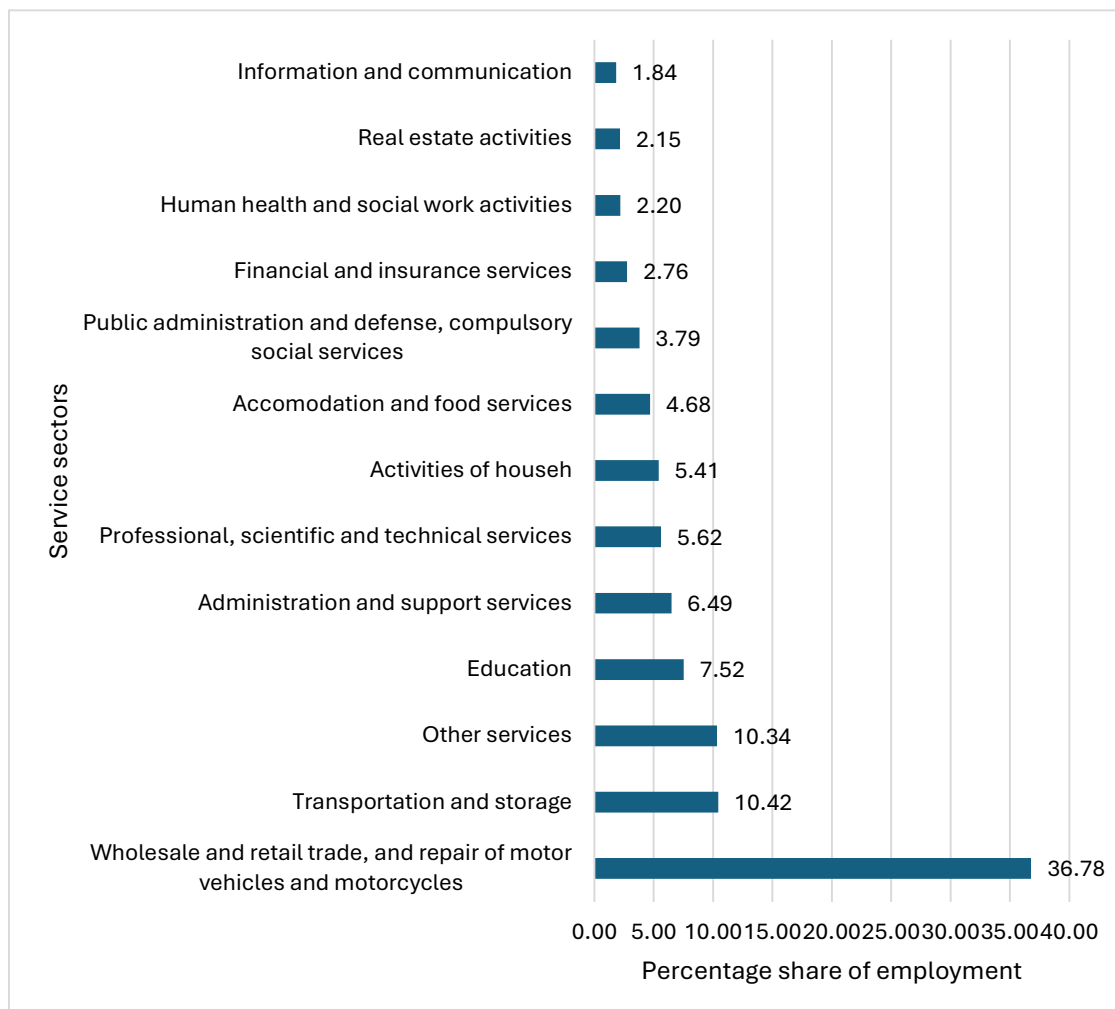


Data source: KNBS 2021- Kenya Continuous Household Survey

Services Sector Employment

Majority of those working in the services sector are in wholesale and retail trade, and repair of motor vehicles and motorcycles (Figure 14).

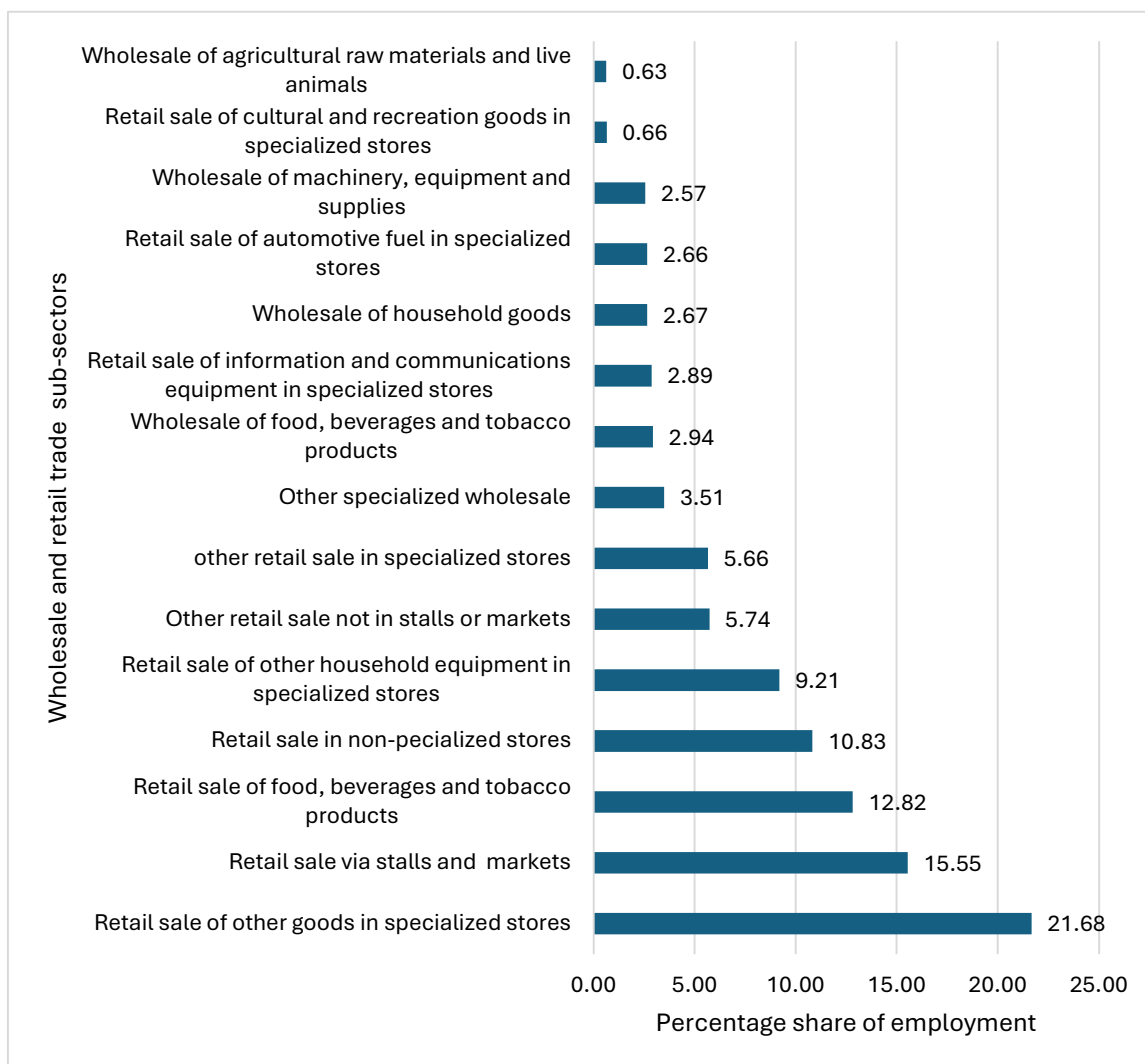
Figure 14: Percentage share of employment in the service sector



Data source: KNBS 2021- Kenya Continuous Household Survey

In the wholesale and retail trade, and repair of motor vehicles and motorcycles sector, the majority work in retail of other goods in specialized stores (Figure 15).

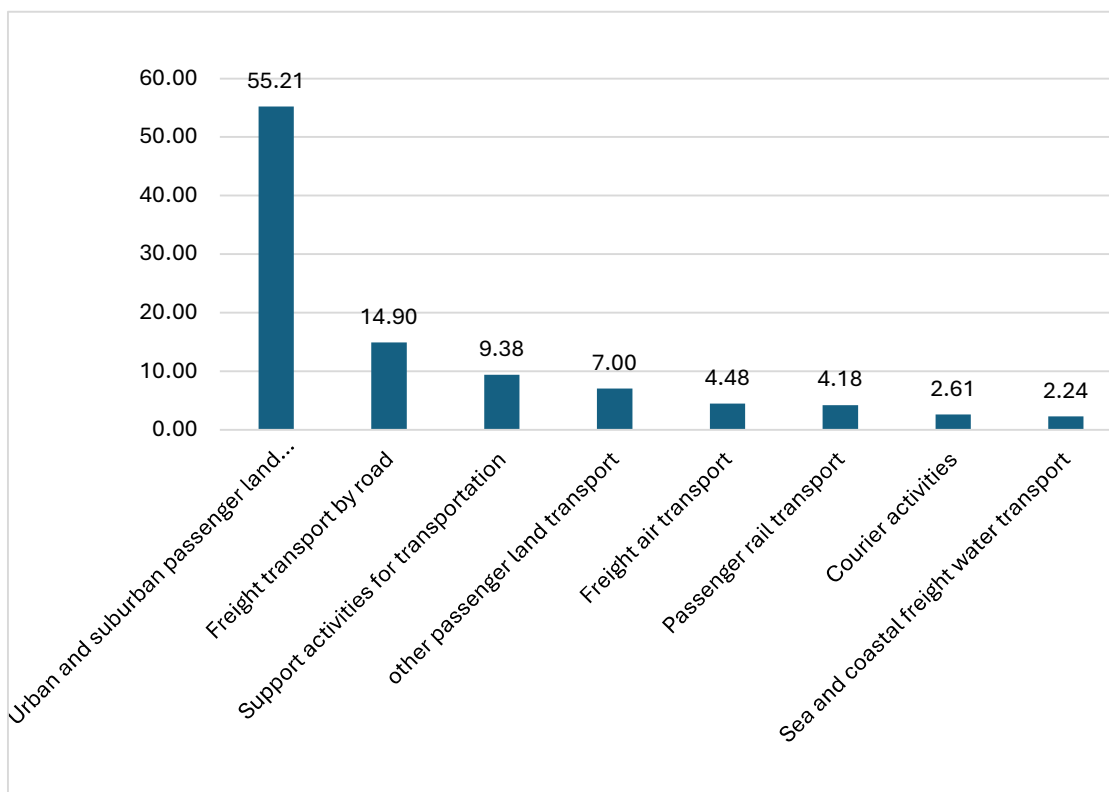
Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors



Data source: KNBS 2021- Kenya Continuous Household Survey

In the transportation and storage sector, the majority of those employed are in urban and suburban passenger land transport (Figure 16).

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

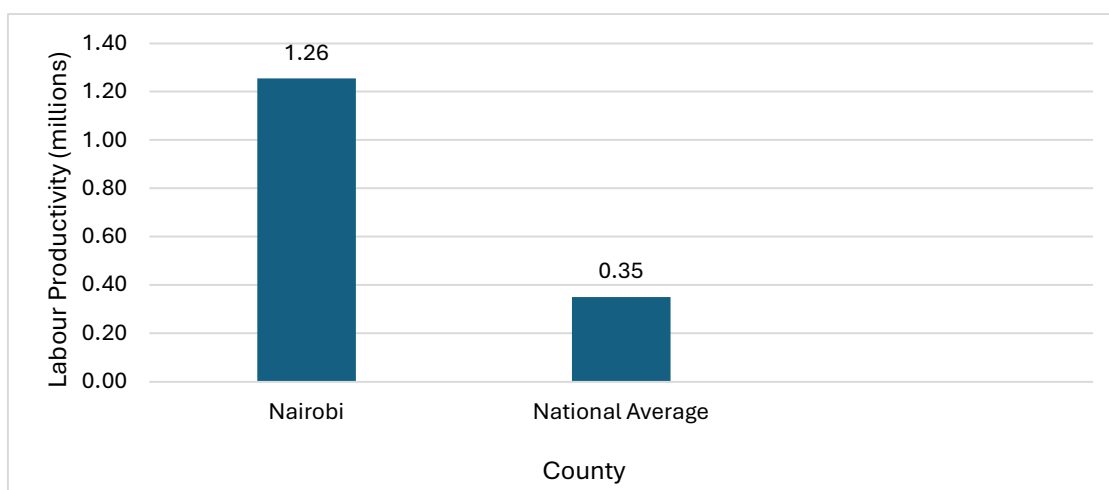


Data source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity for Nairobi County is higher than the national average (Figure 17).

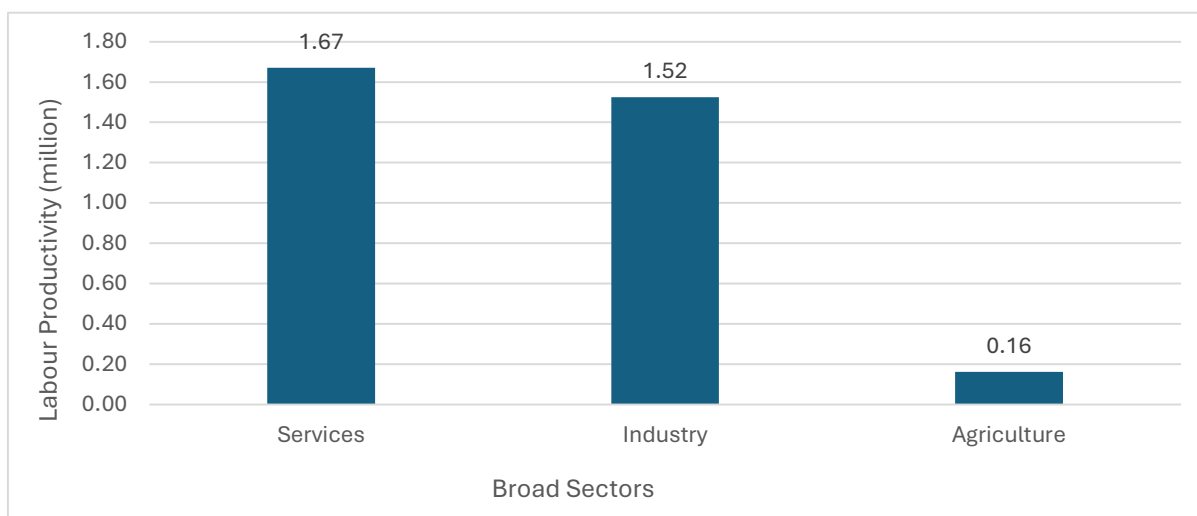
Figure 17: Labour productivity ratios (millions)



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

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

Figure 18: Labour productivity by sectors

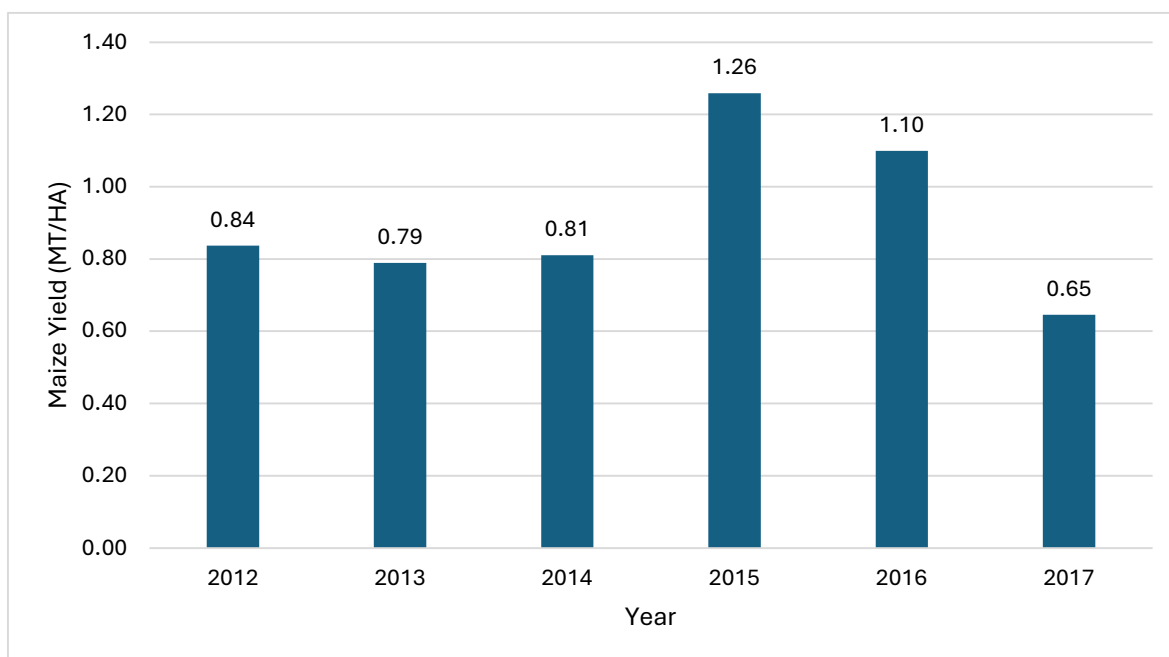


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector

Maize productivity in Nairobi County as measured by maize yields is low and fluctuating. The average yield for the years under review is 0.95 MT/HA with the highest yields in 2015 while the lowest were in 2017 (Figure 19).

Figure 19: Maize yield (MT/HA)

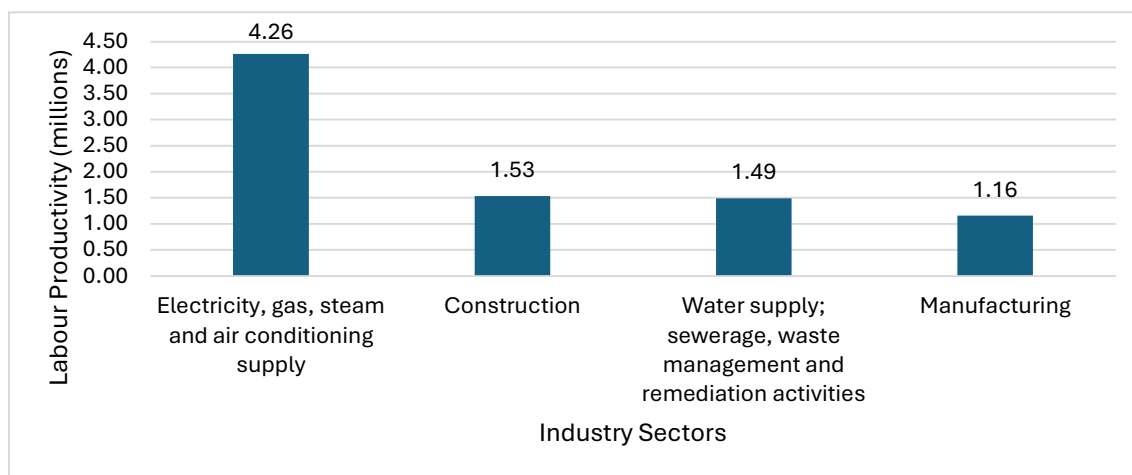


Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Industry Sector

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

Figure 20: Labour productivity by Industry sectors

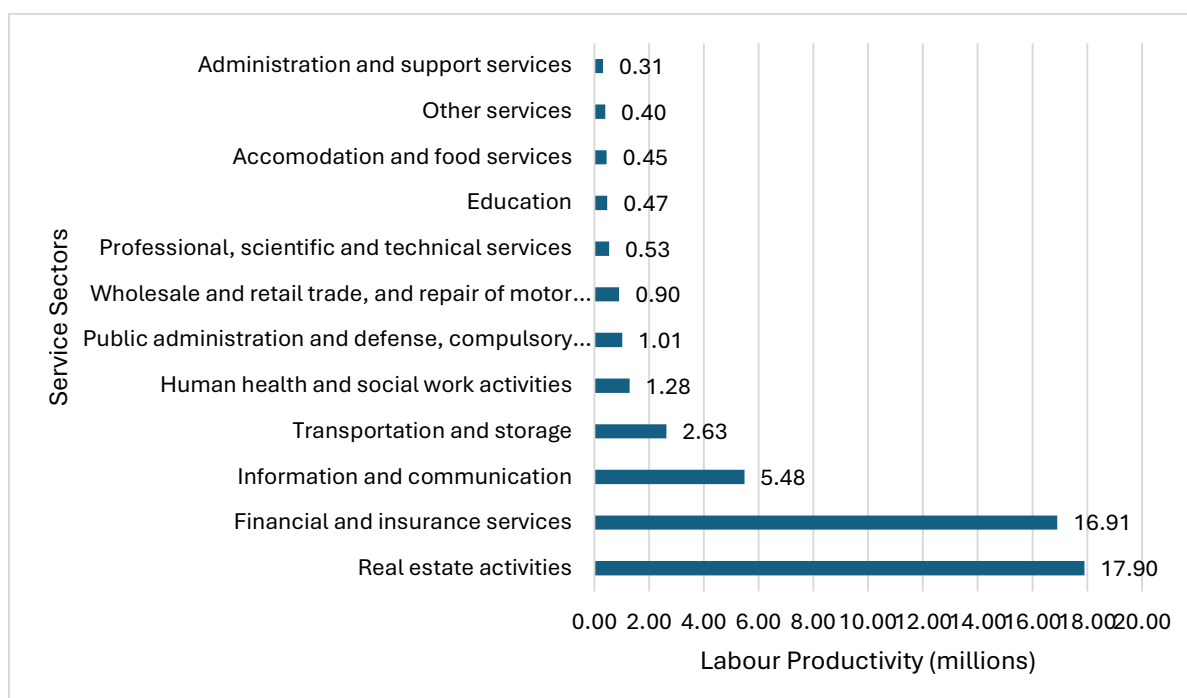


Data source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Services Sector

The real estate sub-sector has relatively higher labour productivity when compared with other sub-sectors within the services sector.

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 gross value added. The industry sector is substantive but almost stagnating. Manufacturing has been declining overtime and almost at the same share as construction in industry sector. The financial and insurance activities sector dominates the services sector.
- (ii) The indicators of quality of labour are within national average. More interventions are however required to increase primary and secondary school enrolment and immunisation and reduce the stunting.
- (iii) The essential infrastructure and capital indicators that support the growth of county output are higher than the national average. However, interventions are required to increase access to improved sanitation and internet.
- (iv) The services sector is the highest employer followed by the industry sector. Majority of those working in the service sector are in wholesale and retail trade with employment concentrated in in retail of other goods in specialized stores. In industry sector, manufacturing has the highest share of employment, which is concentrated in manufacture of textiles and wearing apparels and manufacture of food products. In agriculture, the majority practice mixed farming.
- (v) Labour productivity for Nairobi County is higher the national average labour productivity. The services sector had the highest productivity followed by the industry sector while the agriculture sector has the lowest labour productivity. Electricity, gas, steam and air conditioning supply has the highest labour productivity in the industry sector while the real estate sub-sector relatively higher labour productivity in services sector.

Policy Recommendations

- (i) Put in place measures to promote urban and peri-urban farming to support food security in the county and increase agriculture productivity in the county.
- (ii) Create an enabling environment for private sector growth by investing in essential infrastructure and support the growth of MSMEs through capacity building and credit schemes for job creation and growth of county output.
- (iii) Secure the quality of future labour force by implementing nutritional programmes to reduce stunting. Additionally improve the quality of labour by prioritizing 100 per cent secondary school transition rates to enable acquisition of skills.
- (iv) Support the growth of informal manufacturing firms and start-up through promoting innovation and digitization to increase competitiveness.
- (v) The county to market tourism sites in the city and encourage investment in conferencing facilities that attract international MICE.

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