



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Nyeri County

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Overview of the County

Nyeri County is a member of the Central Region and Economic Bloc (CEREB). The county is a semi-arid county that experiences between 10 and 29 per cent aridity. The land mass of Nyeri County stands at 3,325 km² and has ten Sub-Counties namely: Tetu, Kieni East, Kieni West, Mathira East, Mathira West, Nyeri South, Mukurweini, Nyeri Central, Mt. Kenya Forest, and Aberdare Forest.

Key Highlights

The productivity of Nyeri County is characterized by the following:

- (i) The services sector has the largest share of gross value added with transportation and storage taking a dominant share. The industry sector share is declining as does the share of the manufacturing sector while construction sector expands. In agriculture sector, livestock production is not integrated into the leather value chain.
- (ii) The quality of labour requires efforts to address stunting and child poverty.
- (iii) The essential infrastructure requires investment in internet connectivity, and access to improved sanitation.
- (iv) The agriculture sector dominates in employment with crop production taking the lead, and there is potential for fish farming. In services sector, the wholesale and retail trade dominate employment, with the majority being in the retail of food, beverages, and tobacco products. The majority of those employed in manufacturing are in textile and wearing apparel.
- (v) Labour productivity is lowest in agriculture sector. In industry sector, water supply, sewerage, waste management and remediation activities and manufacturing sub-sectors have the highest labour productivity. In the service sector, the public administration and defence sector, which is a non-market service, has the highest labour productivity while the wholesale and retail trade sub-sector which has the highest employment in the services sector has the lowest labour productivity.

To enhance productivity

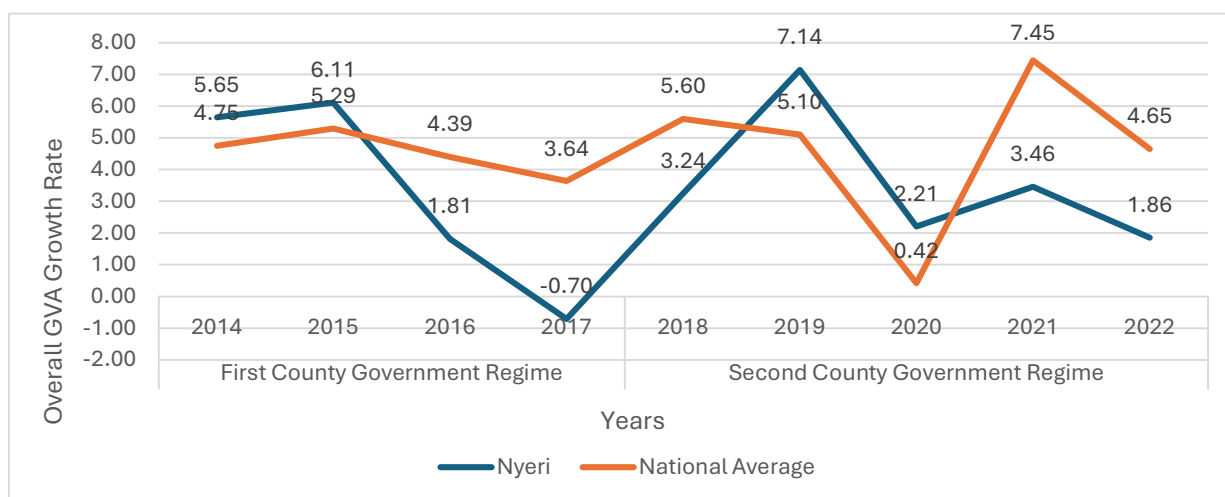
- (i) Transform agriculture by supporting crop production with increased uptake of crop insurance to mitigate the effects of climate change, develop the livestock value chain to integrate small farmers into the dairy and leather industry, promote fish farming, and build skills for farmers to uptake technologies that improve productivity.
- (ii) Encourage investments in manufacturing to support agro-processing and promote the textile industry. In addition, support the implementation of the County Aggregation Industry Park and create an enabling environment for MSMEs.
- (iii) To enhance the quality of labour, implement nutrition programmes to support the reduction in stunting and child poverty. Further, improve internet connectivity and access to improved sanitation to ensure an adequate supply of essential infrastructure services.

Nyeri County Economic Performance

Nyeri County contributes on average to 2.1 per cent of the National Gross Value added with an average GVA of Ksh 151,6952 million. The GVA per capita for Nyeri County is Ksh 199,826 with an average population growth of 0.8 per cent and overall poverty levels at 26.4 per cent.

Nyeri County has shown a steady growth in GVA with an average growth rate of 3.42 per cent from 2013-2022 which is lower than the national average growth of 4.37 per cent as shown in Figure 1. The highest growth rate was experienced in 2019 while the lowest was in 2017.

Figure 1: Nyeri County GVA growth rate

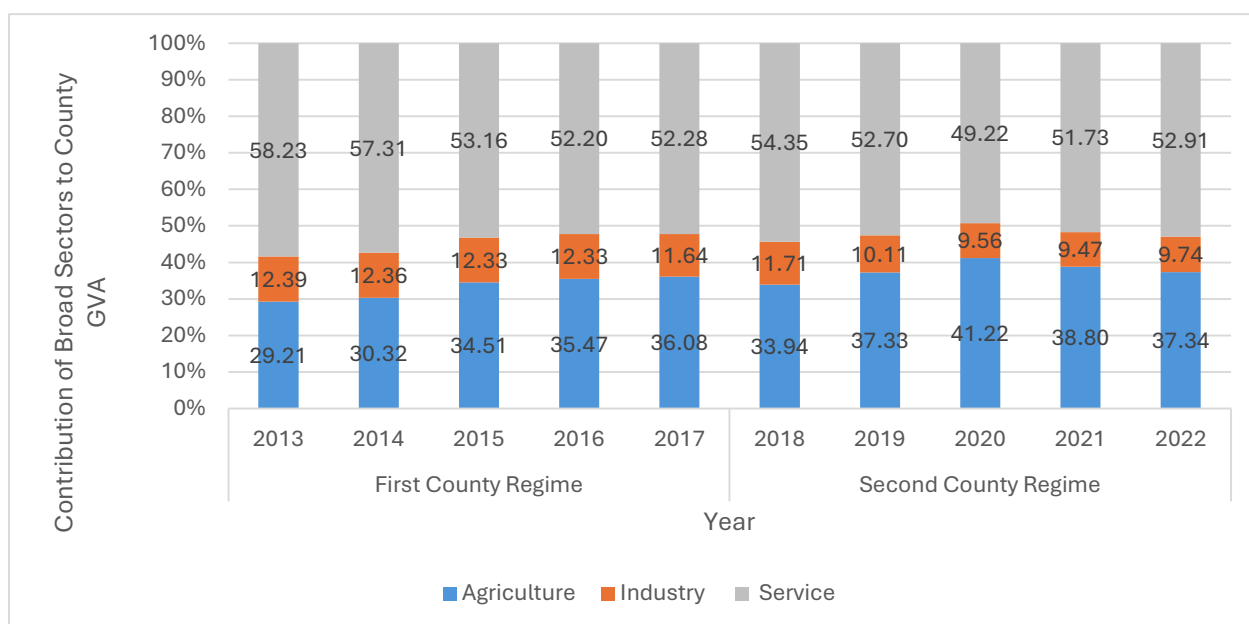


Data Source: KNBS 2023-Gross County Product

Sectoral Analysis of GVA

The services sector is dominant in Nyeri County with an average contribution to GVA of 53.41 per cent. The agriculture sector is second, contributing an average of 35.42 per cent to the GVA while industry contributes about 11.16 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Nyeri County GVA

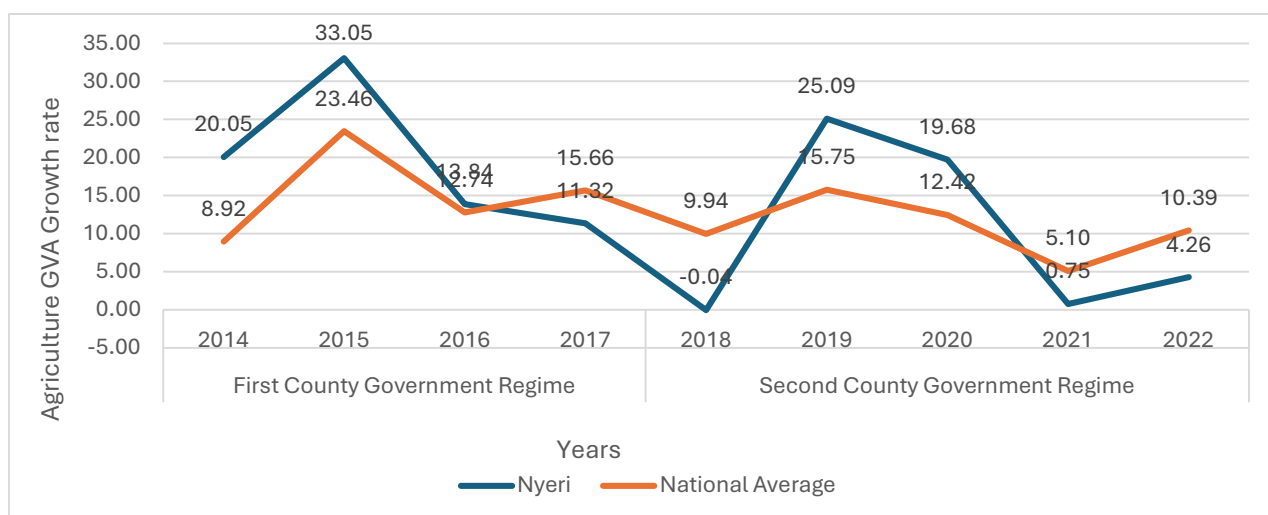


Data Source: KNBS 2023-Gross County Product

Agriculture Sector

The average growth rate of agriculture GVA in 2013-2022 is 14.22 per cent which is above the national average of 12.71 per cent as shown in Figure 3.

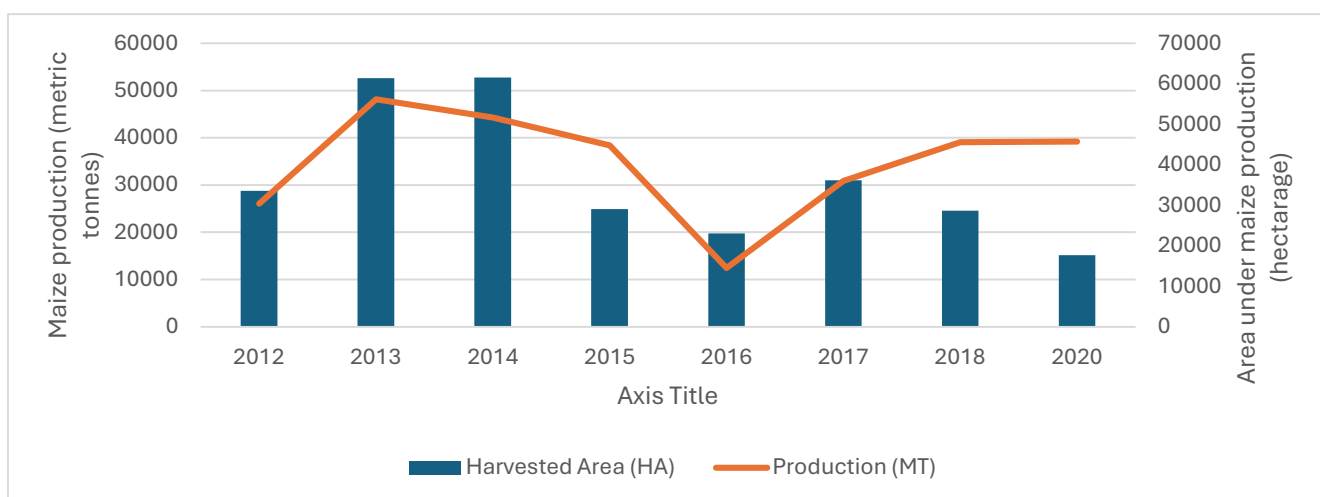
Figure 3: Nyeri County agriculture GVA growth rate



Data Source: KNBS 2023-Gross County Product

Maize, the main staple food in the country, is also the main food crop produced in Nyeri County. Maize production and area under production was highest in 2013 and 2014. This then declined over the years with the lowest area under maize production being in 2020. The lowest maize production (metric tonnes) was in 2016 due to an armyworm invasion in the African region (Figure 4).

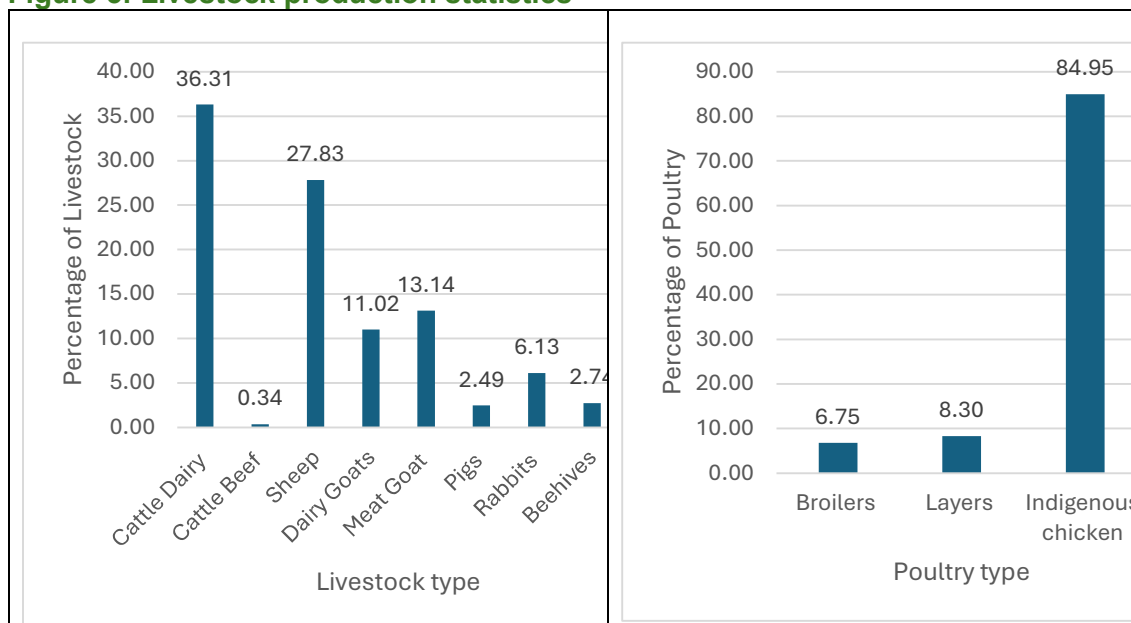
Figure 4: Maize production and average area under maize production

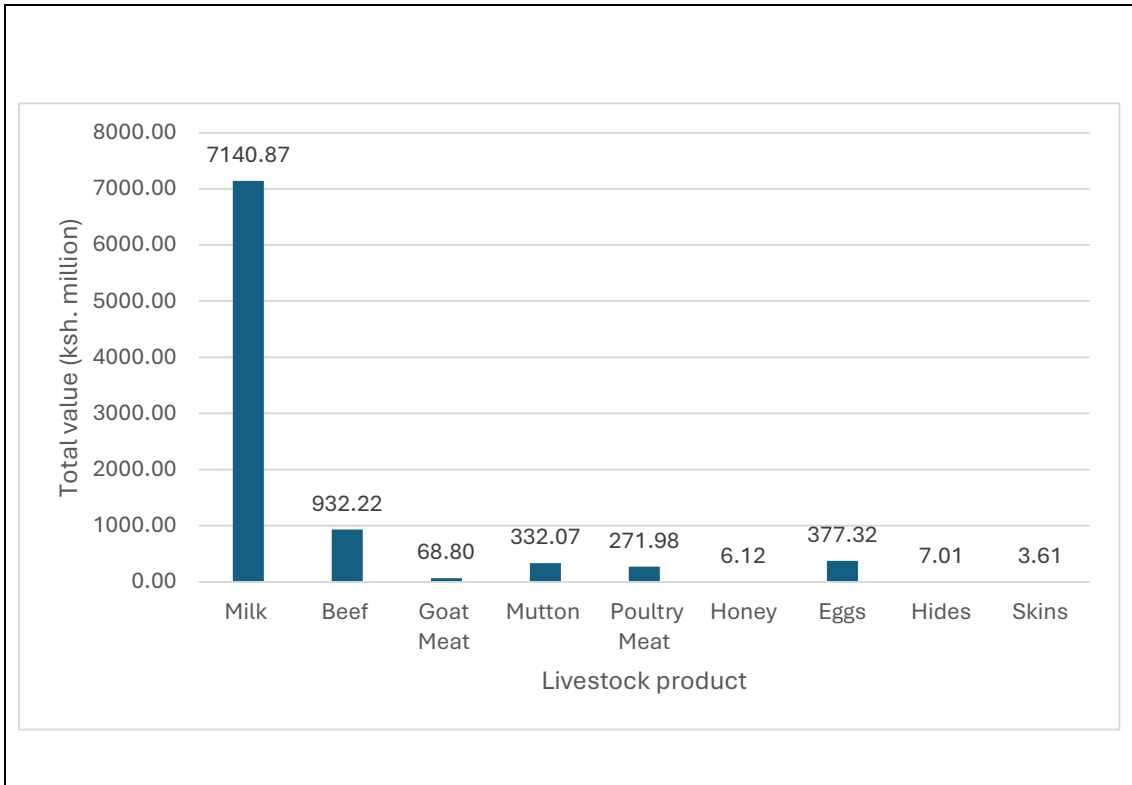


Data source: National Information Platform for Food and Nutrition (NIPFN)

Although livestock production in Nyeri County is on a smaller scale when compared to crop production, the county has one of the highest numbers of dairy cattle in the country. The most common types of livestock in the county are dairy cattle and wool sheep. Poultry production is also common in the county with the most common type being indigenous chicken. Nyeri County's comparative advantage in dairy farming is reflected in the high total value of milk (Figure 5).

Figure 5: Livestock production statistics



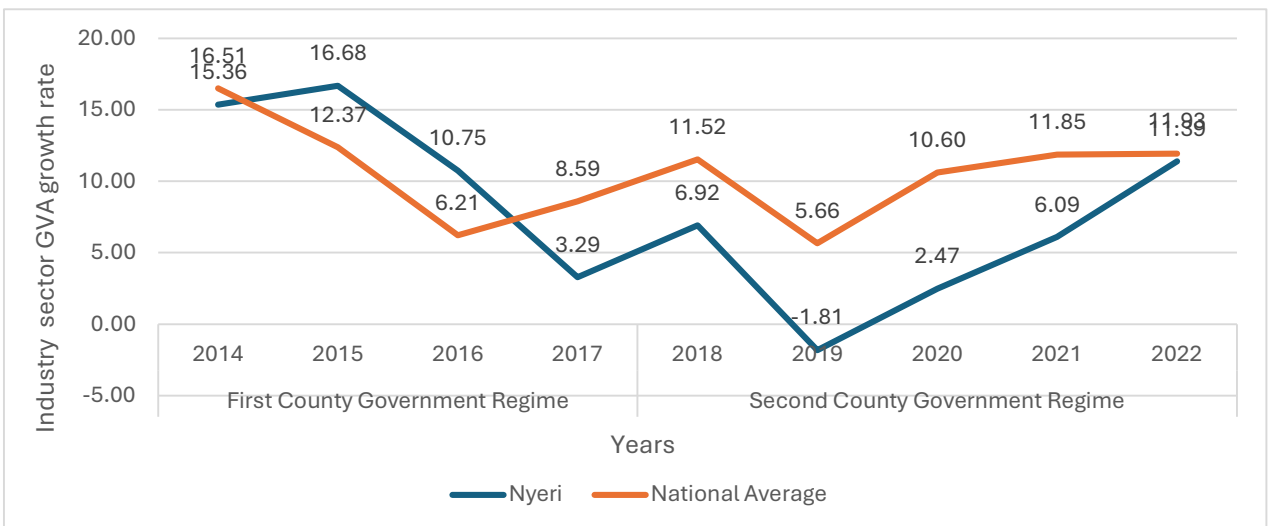


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The average growth rate in industry sector is 7.90 per cent which is below the national average of 10.58 per cent as shown in Figure 6.

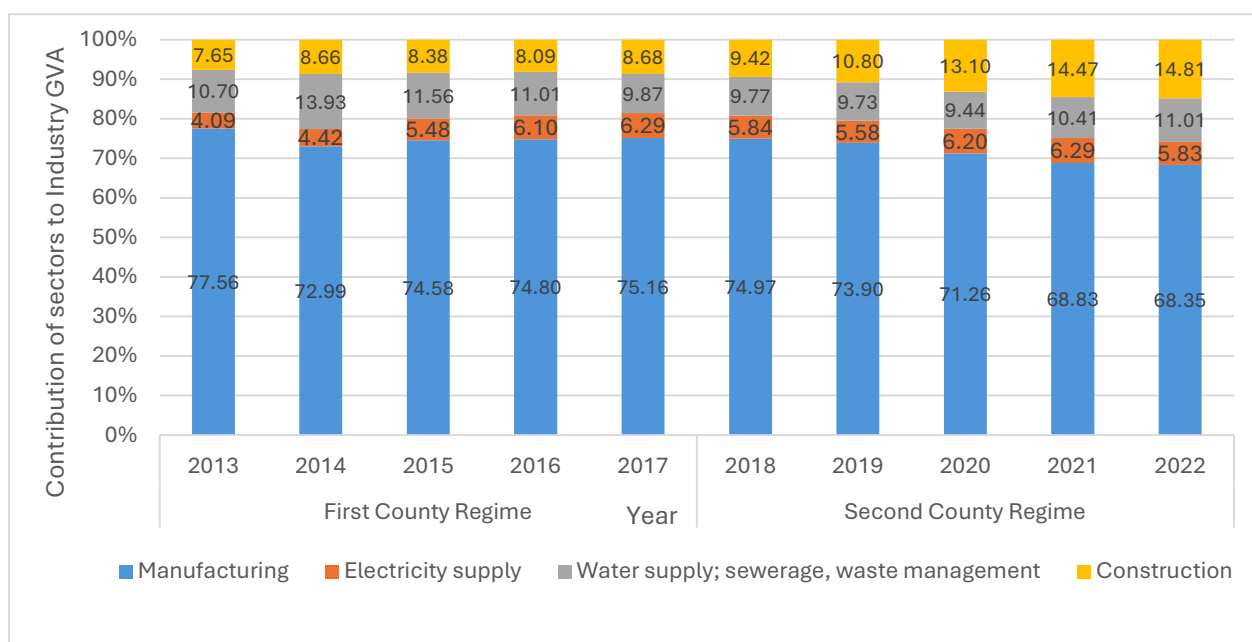
Figure 6: Nyeri County industry GVA growth rate



Data Source: KNBS 2023-Gross County Product

Manufacturing dominates the industry sector as shown in Figure 7. The share of manufacturing has been decreasing as the share of the construction sector increased.

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

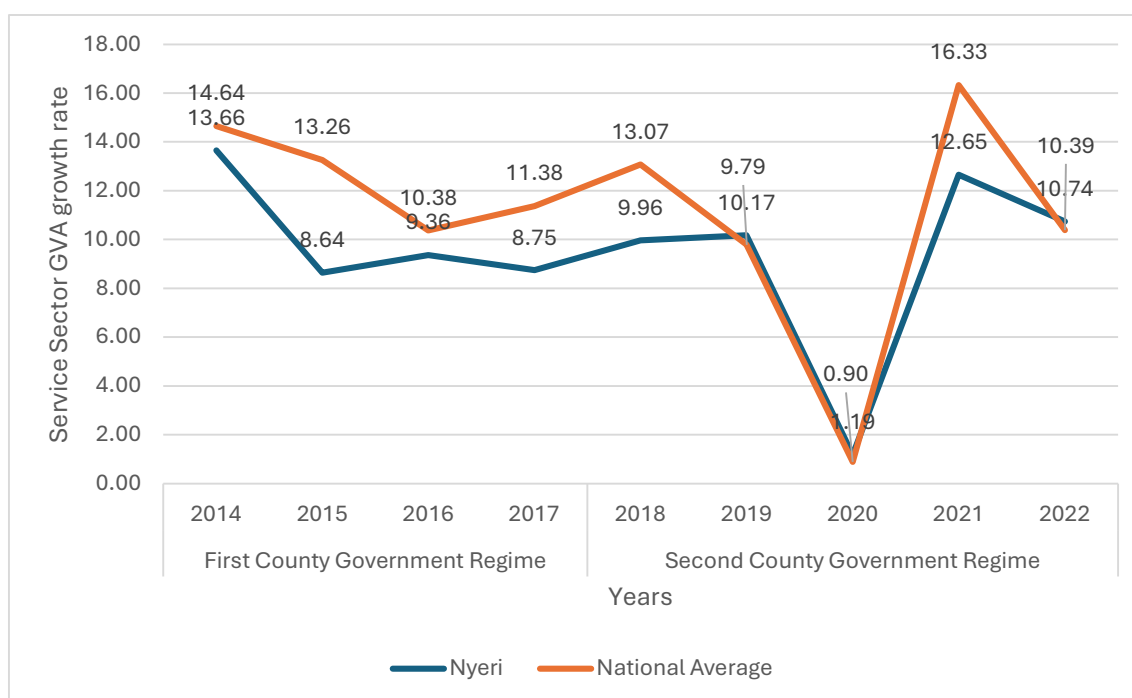


Data Source: KNBS 2023-Gross County Product

Services Sector

The average services sector growth rate is 8.49 per cent, below the national average of 11.13 per cent as shown in Figure 8.

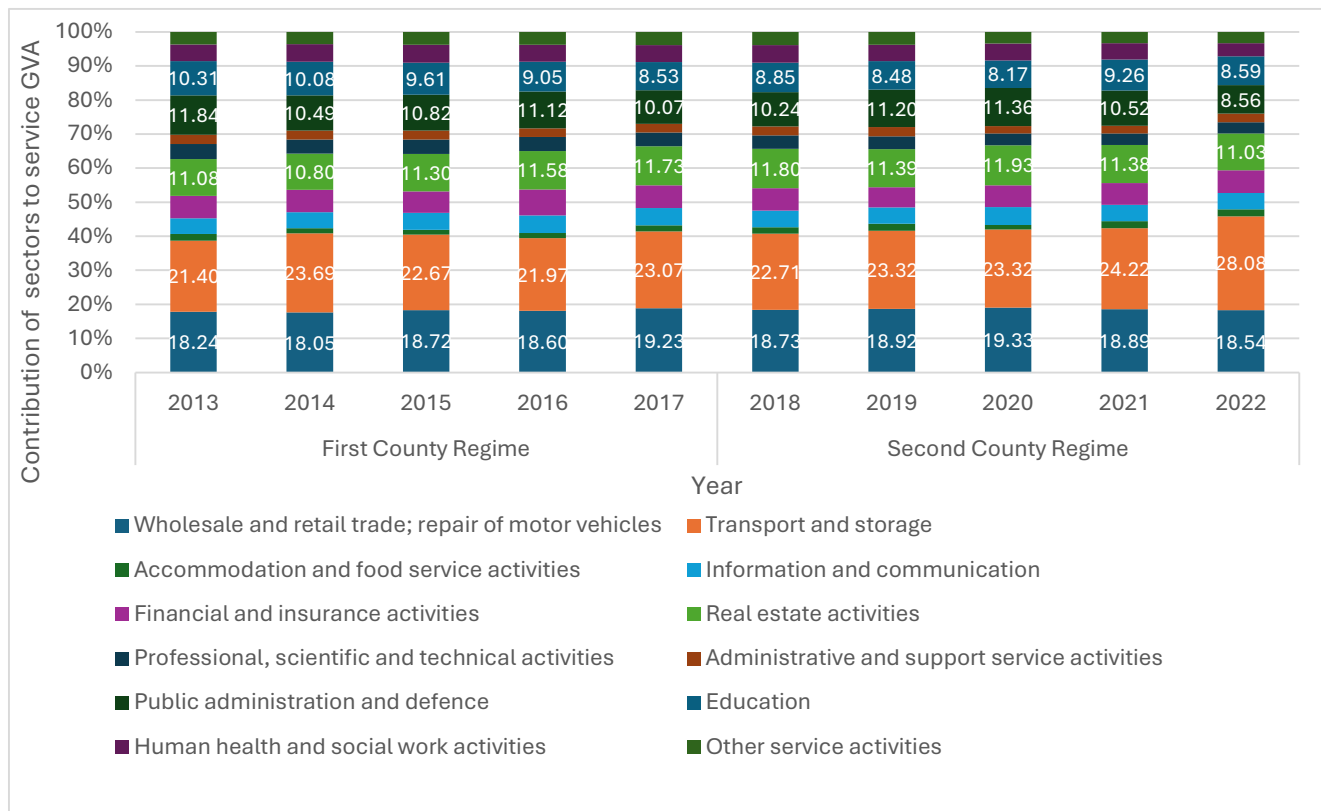
Figure 8: Nyeri County services sector GVA growth rate



Data Source: KNBS 2023-Gross County Product

The transportation and storage sub-sector dominate the services sector with the highest contribution to service GVA at 23.44 per cent. The wholesale and retail trade sector is the second highest contributor to services GVA at 18.72 per cent. The real estate activities average of 11.40 per cent as shown in Figure 9.

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



Data Source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force for Nyeri County

Nyeri County has a total of 473,982 working-age population, which is about 62.44 per cent of the county population. Most of the working-age population is 35-64 years at 50.09 per cent as portrayed 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	23,801	22,529	46,330	9.77
18-24	43,946	42,420	86,366	18.22
25-34	50,398	53,484	103,882	21.92
35-64	116,386	121,018	237,404	50.09
Total	234,531	239,451	473,982	

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

Most of the population in Nyeri sub-counties are persons in the working age categories. Aberdare Forest and Mount Kenya Forest regions have the highest percentage of persons of working age as shown in Table 2.

Table 2: Sub-County land 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	
Tetu	80,448	5,003 (10.38)	7,928 (16.44)	9,414 (19.53)	25,869 (53.65)	48,214 (59.93)
Kieni East	110,372	6,915 (9.94)	12,449 (17.89)	16,066 (23.09)	34,163 (49.09)	69,593 (63.05)
Kieni West	88,520	6,275 (11.63)	9,273 (17.18)	10,781 (19.97)	27,646 (51.22)	53,975 (60.97)
Mathira East	99,062	5,671 (8.88)	12,782 (20.01)	13,926 (21.80)	31,491 (49.30)	63,870 (64.47)
Mathira West	59,892	3,754 (10.50)	5,995 (16.77)	6,720 (18.80)	19,271 (53.92)	35,740 (59.67)
Nyeri South	91,079	5,781 (10.34)	9,801 (17.52)	11,129 (19.90)	29,222 (52.24)	55,933 (61.41)
Mukurweini	89,131	5,637 (10.70)	8,543 (16.21)	10,057 (19.09)	28,456 (54.00)	52,693 (59.12)
Nyeri Central	140,335	7,288 (7.78)	19,563 (20.87)	25,707 (27.43)	41,168 (43.92)	93,726 (66.79)
Mt. Kenya Forest	188	6 (4.11)	21 (14.38)	36 (24.66)	83 (56.85)	146 (77.66)
Aberdare Forest	106	0 (0.00)	11 (11.96)	46 (50.00)	35 (38.04)	92 (86.79)

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

Nyeri County has high performance in socioeconomic indicators that affect the quality of labour as shown in Table 3.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	92.70	78.41
Pre-primary net enrolment rate (2019)	89.15	67.51
Primary school net enrolment rate (2020)	88.30	77.72
Secondary school net enrolment rate (2020)	91.60	54.18
Average years of schooling (2014)	9.30	7.78
Percentage of children 12 -23 months fully vaccinated (%)	84.30	74.97
Percentage of stunted children	13.00	19.75
Percentage of teenage pregnancy	4.50	15.79
Primary to secondary transition rates (2020)	93.70	86.13
Pupil-teacher ratio (primary school)	24.00	28.28
Food poverty head count (%)	17.50	33.63
Child poverty head count (%)	25.30	42.67

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

Nyeri County has higher performance on essential infrastructure and capital indicators that support production of county output compared to national average as shown in Table 4.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 census)	71.80	38.52
Distribution of population using the Internet (2019 census)	29.90	18.69
Rural Access Index (2018)	94.17	63.72
Access to improved sanitation (2018)	55.00	59.04
Access to improved water (2018)	82.70	65.33
Financial inclusion level (2021)	93.80	81.01
The proportion of primary schools with internet	29.45	27.65
Proportion of secondary schools with functional internet	42.90	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	94.19	51.71
Percentage of households using bank usage (overall)	59.00	38.18
Percentage of households using mobile money	89.80	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 high at 73.40 per cent. Most of those working are the non-youth (35-64 years) at 46.30 per cent while for the youth (18- 34) are at 26.69 per cent. There is little disparity in employment by gender as the percentage of the male is 52.28 per cent while female is 54.24 per cent. The unemployment rate is 5.11 per cent with unemployment being slightly higher for the youth (18-34 years) at 3.14 per cent as shown in Table 5. The percentage of persons 5–17 years old working is 0.98 per cent indicating that the county has low levels of child labour. The inactivity rate is higher for the youth (15-24 years) as this age category is still schooling, but low for persons of prime age (25-64 years) which indicates high labour utilization.

Table 5: Nyeri County employment statistics

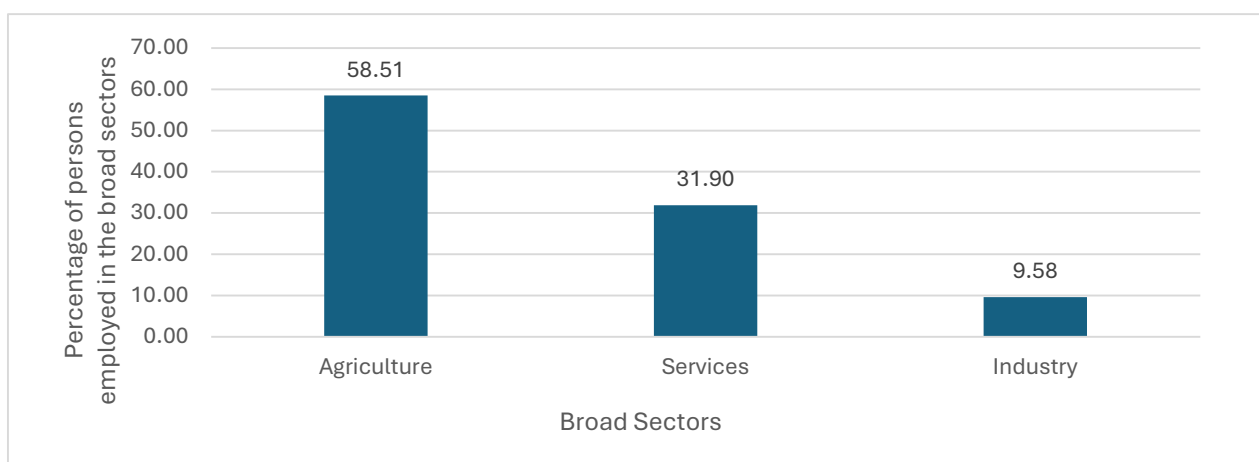
Employment statistics	Youth	Non youth
Employment to population ratio (%)	26.69	46.30
Unemployment rate	3.14	1.93
Percentage of persons 5-17 years old working	0.98	-
Inactivity rate	17.49	2.93

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

Sectoral Employment

The agriculture sector is the highest employer in Nyeri County at 58.51 per cent followed by the services sector at 31.90 per cent. The industry sector is third at 9.58 per cent as shown in Figure 10.

Figure 10: Percentage of persons employed in the broad sectors

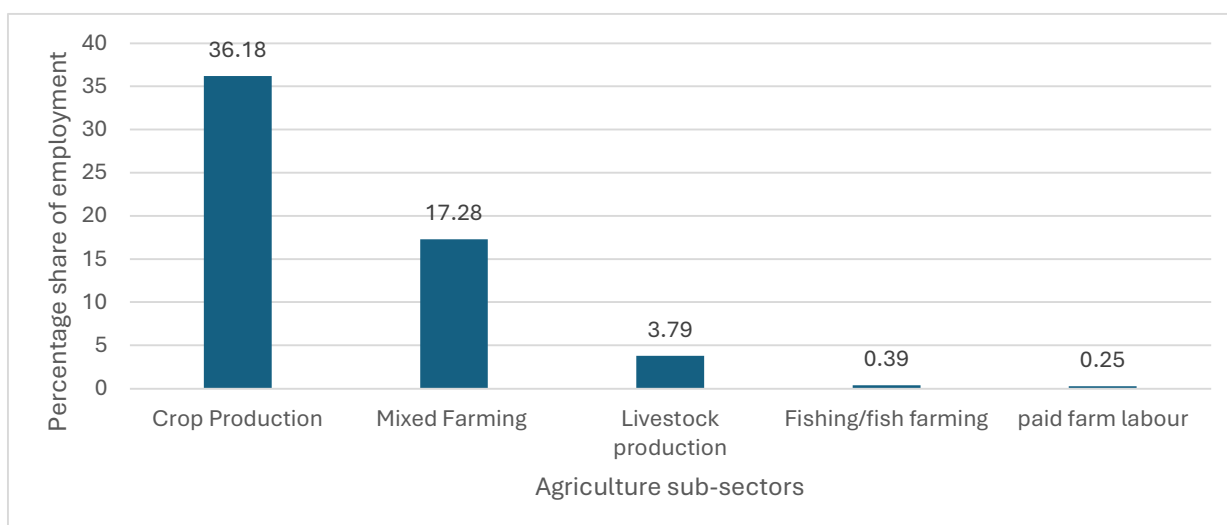


Data Source: KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector Employment

In agriculture sector, the majority are those practicing crop production as shown in Figure 11.

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

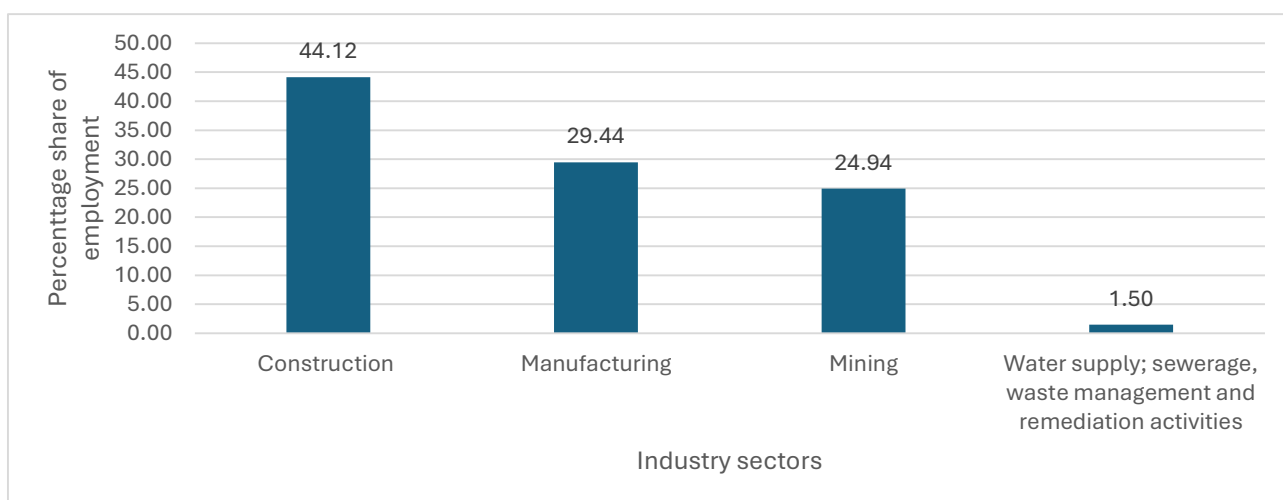


Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector Employment

The majority of those working in the industry sectors are in the construction and manufacturing sectors (Figure 12). In construction, employment was mainly in the construction of buildings while mining mainly entailed the quarrying of stones.

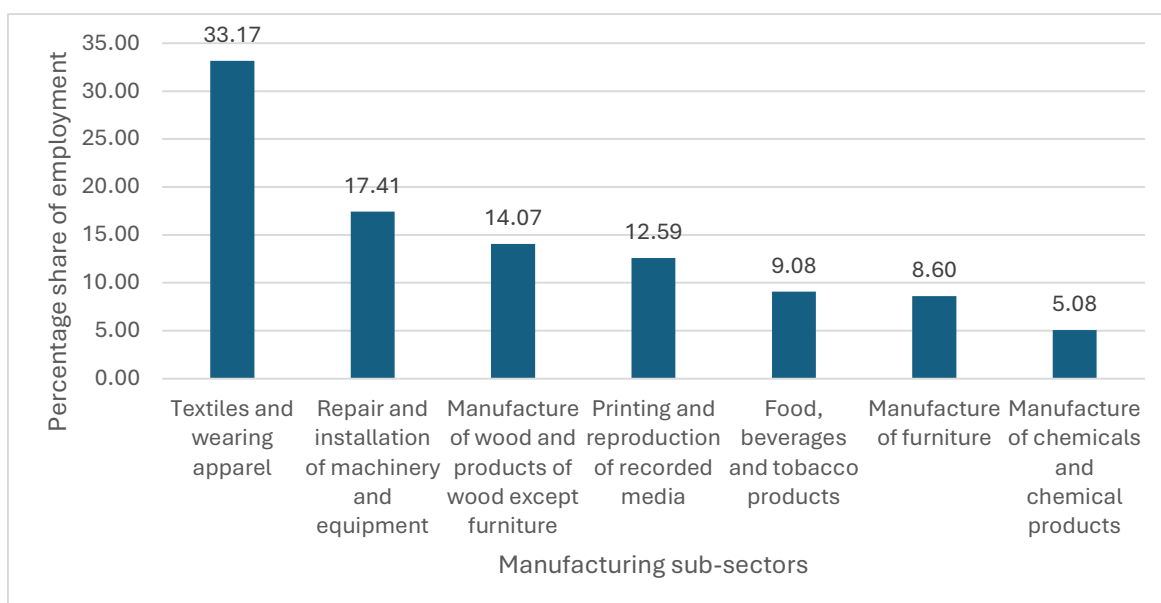
Figure 12: Percentage share of employment in the industry sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

A disaggregation of employment in manufacturing shows that the majority of those employed in the sector work in low-technology manufacturing sub-sectors such as textile and repair and installation industries (Figure 13).

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

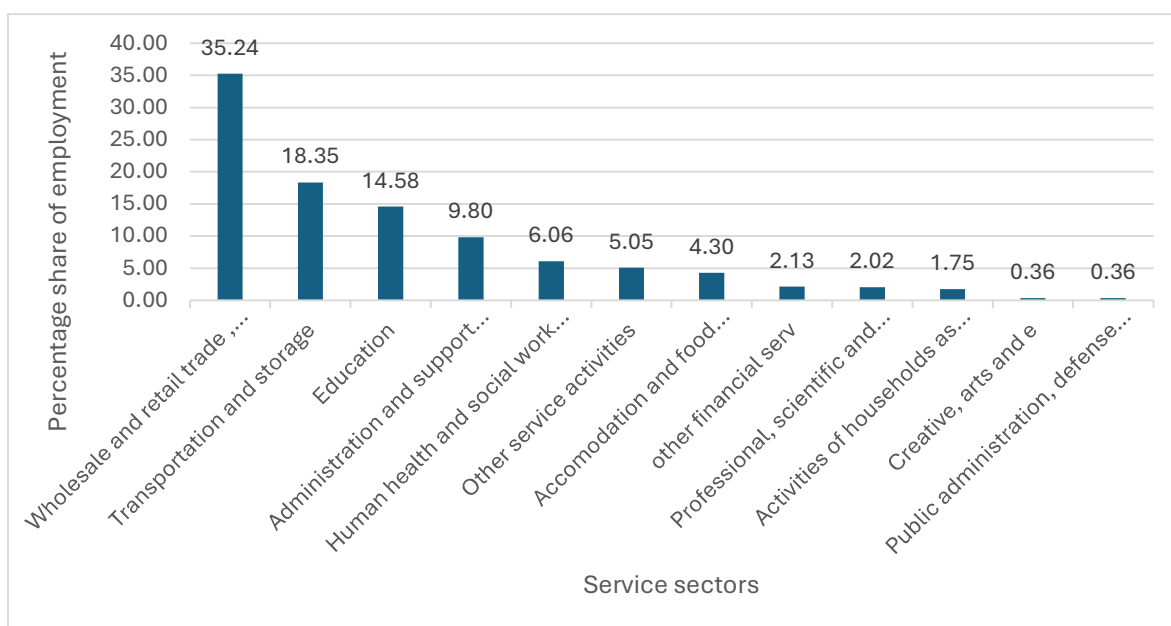


Data Source: KNBS 2021- Kenya Continuous Household Survey

Services Sector Employment

The majority of those working in the service sector are in wholesale and retail trade. This sector represents the intermediate steps in the distribution of merchandise between producers and consumers of goods. Despite the higher share of employment in the service sector, the output of the sector remains low with the sector having high levels of informality as shown 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, the majority work in the retail of food, beverages, and tobacco products as shown in Figure 15.

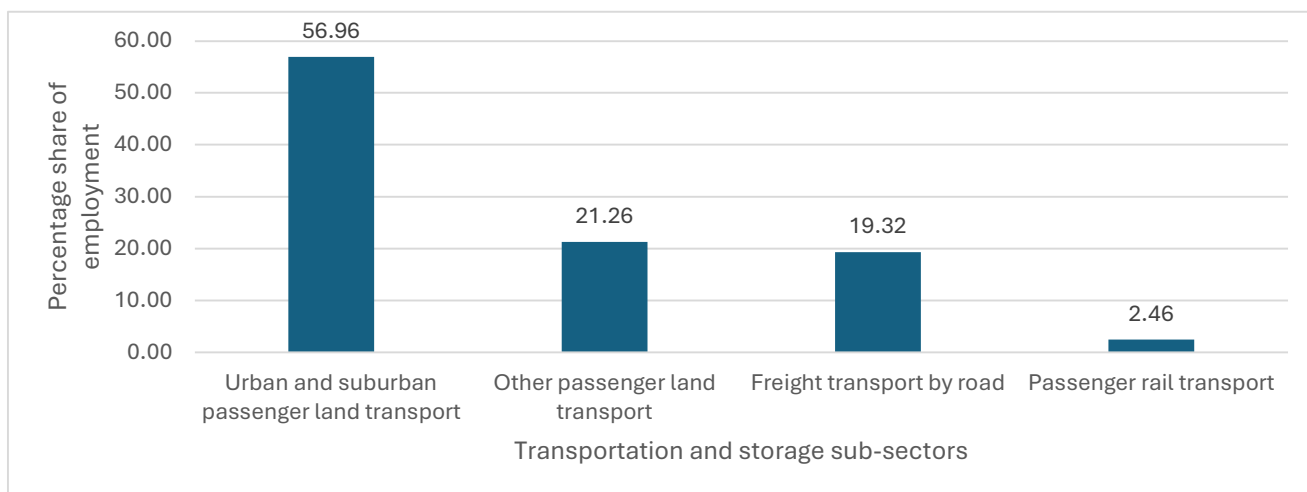
Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

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

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

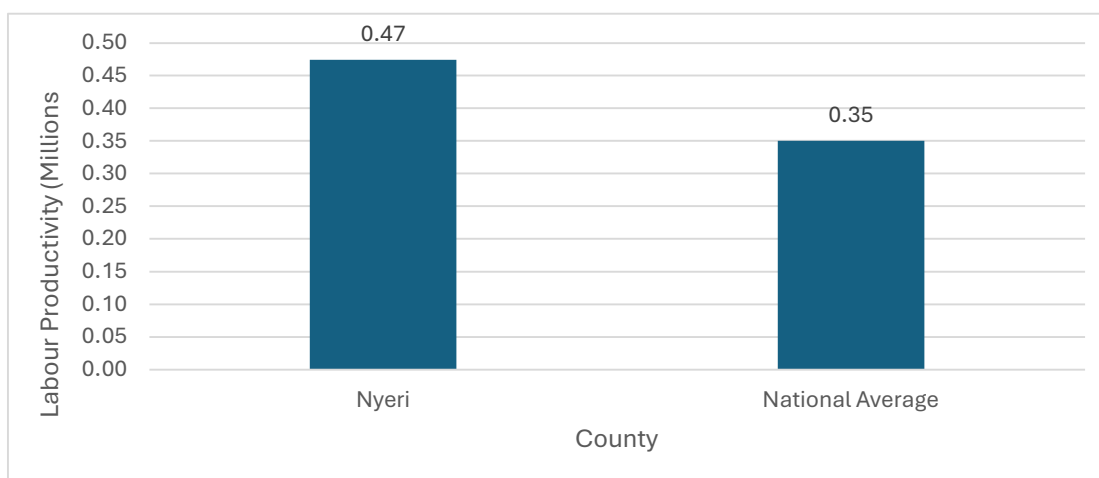


Data Source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity¹ for Nyeri County is above the national average as shown in Figure 17.

Figure 17: Labour productivity ratios (millions)

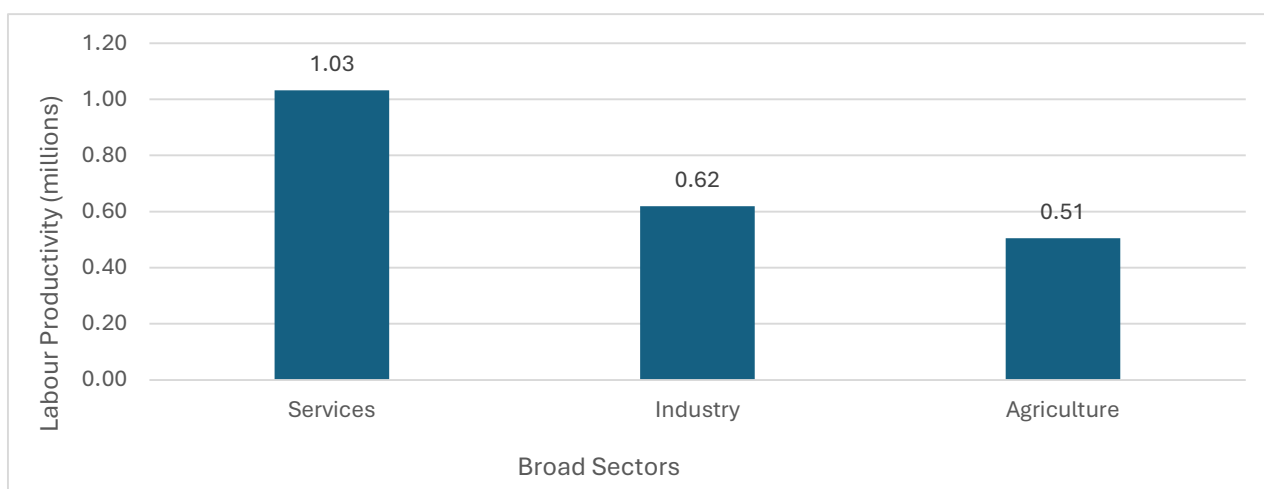


Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

The services sector has the highest labour productivity followed by the industry sector while the agriculture sector has the least labour productivity as shown in 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



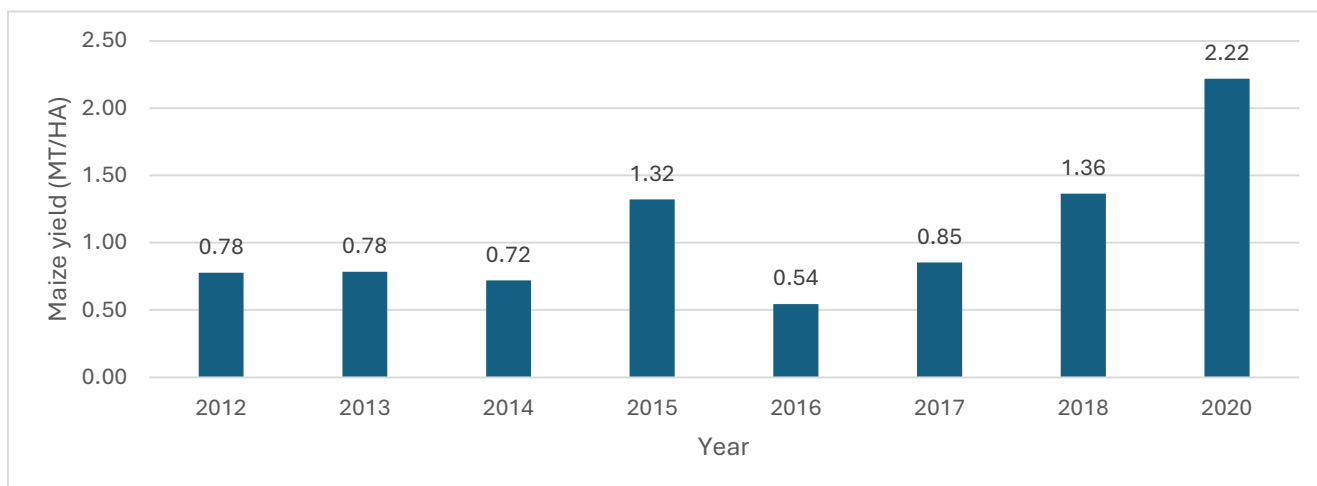
Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

KCHS 2021 data.

Agriculture Productivity

In the agriculture sector, maize productivity has fluctuated over the years, the highest being in 2020 but on average has been low at an average of 1.07 MT/HA (Figure 19).

Figure 19: Maize yield (MT/HA)

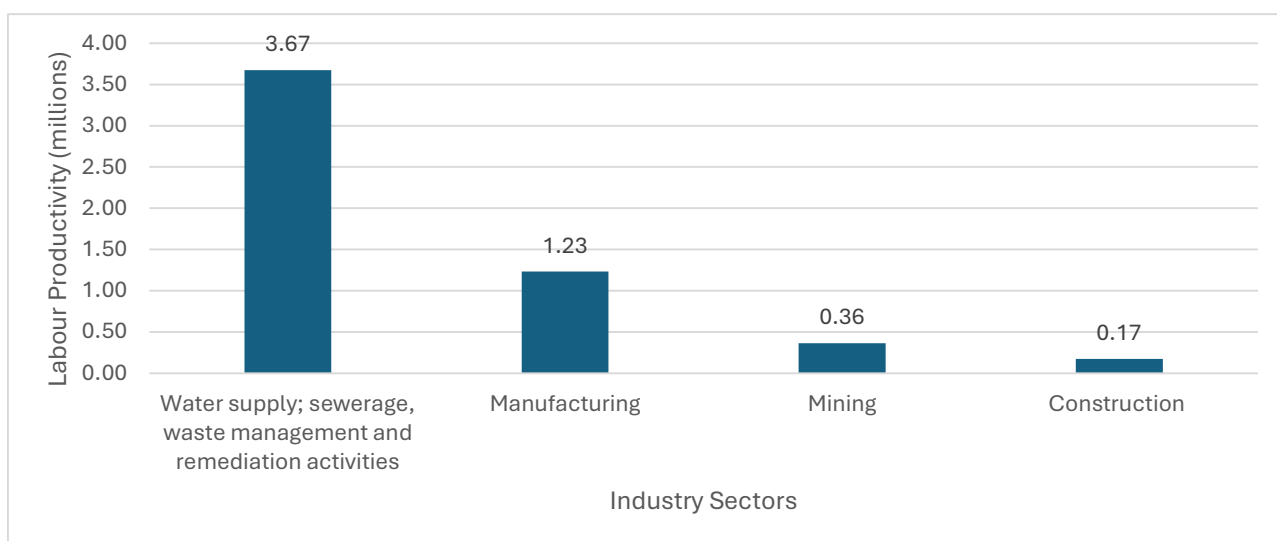


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector Labour Productivity

Water supply, sewerage, waste management and remediation activities, and manufacturing sub-sectors have the highest labour productivity in the industry sector as shown in Figure 20.

Figure 20: Labour productivity by industry sectors

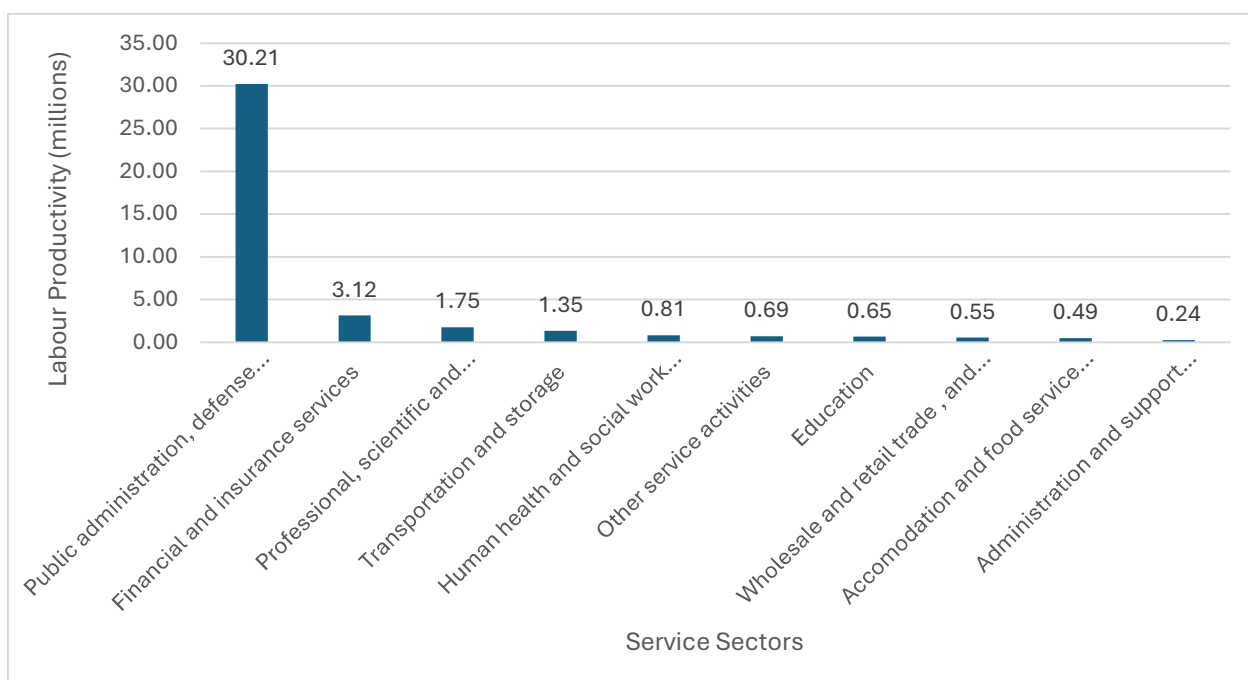


Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Services Sector Labour Productivity

The public administration and defence sector, which is a non-market service, has the highest labour productivity while among the market services, transportation and storage has the highest labour productivity. The wholesale and retail trade sub-sector, which had the highest employment in the services sector, had one of the lowest labour productivities as shown in Figure 21.

Figure 21: Labour productivity in services sectors



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

Key Messages

- (i) The services sector has the largest share of gross value added with transportation and storage taking a dominant share. The share of the industry sector has been declining, with manufacturing share declining as well while construction is growing. In agriculture livestock is characterised by dairy cattle and sheep but not integrated into the leather value chain. While crop farming dominates, the declining area under maize production due to drought shocks and pest invasion is of concern.
- (ii) The indicators of quality of labour show higher performance compared to the national average, but efforts are required to address stunting and child poverty.
- (iii) Some of the indicators of essential services are performing better than the national average but investment is required in internet connectivity, and access to improved sanitation.
- (iv) The agriculture sector dominates with employment with crop production taking a lead, but there is potential for fish farming. In services sector, the wholesale and retail trade dominate employment, with the majority being in the retail of food, beverages, and tobacco products. The majority of those employed in the industry sector work in the construction and manufacturing sub-sectors. Those in manufacturing are in textile and wearing apparel.
- (v) Labour productivity is above the national average. Labour productivity in agriculture sector is the lowest and an example is the low maize yield. In industry sector, water supply, sewerage, waste management and remediation activities and manufacturing sectors had the highest labour productivity. In the services sector, the public administration and defence sector which is a non-market service has the highest labour productivity in the services sector. The wholesale and retail trade sector had the highest employment in the services sector had the lowest labour productivity.

Policy Recommendations

- (i) Invest in agricultural transformation to increase agriculture productivity. This includes supporting crop production with increased uptake of crop insurance to mitigate the effects of climate change, developing the livestock value chain to integrate small farmers into the dairy and leather industry, promoting fish farming, and building the capacity of farmers to uptake technologies that would improve productivity.
- (ii) Encourage investments in manufacturing to support transforming the economy through agro-processing and promoting the textile industry. This will entail supporting the County Aggregation Industry Park and creating an enabling environment for MSMEs.
- (iii) Investments to enhance the quality of labour and the essential infrastructure are critical for productivity growth. This calls for nutrition programmes that support a reduction in stunting and child poverty. Further, is improving internet connectivity and access to improved sanitation.

Acknowledgement

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KIPPRA Policy Briefs are aimed at a wide dissemination of the Institute's policy research findings. The findings are expected to stimulate discussion and also build capacity in the public policy making process in Kenya.

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