



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Baringo County

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Overview of the County

Baringo County is a member of the North Rift Economic Bloc (NOREB). The county is classified as a semi-arid county, experiencing between 30 and 84 per cent aridity levels. The county land size stands at 11,075 km² and has seven Sub-Counties, namely: Baringo Central, Baringo North, East Pokot, Koibatek, Marigat, Mogotio, and Tiaty East.

Key Highlights

The productivity of Baringo County is characterized by the following:

- (i) The services sector has the largest share of the County Gross Value Added (GVA). Livestock production is weakly integrated into the leather value chain. Manufacturing has the highest share of industry, but it has mineral deposits including fluorspar, gold, manganese and iron ore. Transportation and storage services dominate the services sector.
- (ii) The quality of labour requires interventions to increase secondary school enrolment and reduce stunting and teenage pregnancy, and tackle food and child poverty.
- (iii) The essential infrastructure requires interventions to increase access to electricity, internet connectivity, rural roads, improved water and financial services.
- (iv) The agriculture sector is the highest employer. In manufacturing, employment is concentrated in the manufacture of food and beverages. Most of those in the services sector are in the education sector, followed by wholesale and retail trade sector.
- (v) Labour productivity is highest in the services sector while agriculture has the lowest labour productivity.

To enhance productivity:

- (i) Build a climate resilience livestock sector by increasing the uptake of weather-based insurance schemes for livestock production and create awareness on the use of the information from the drought early warning systems.

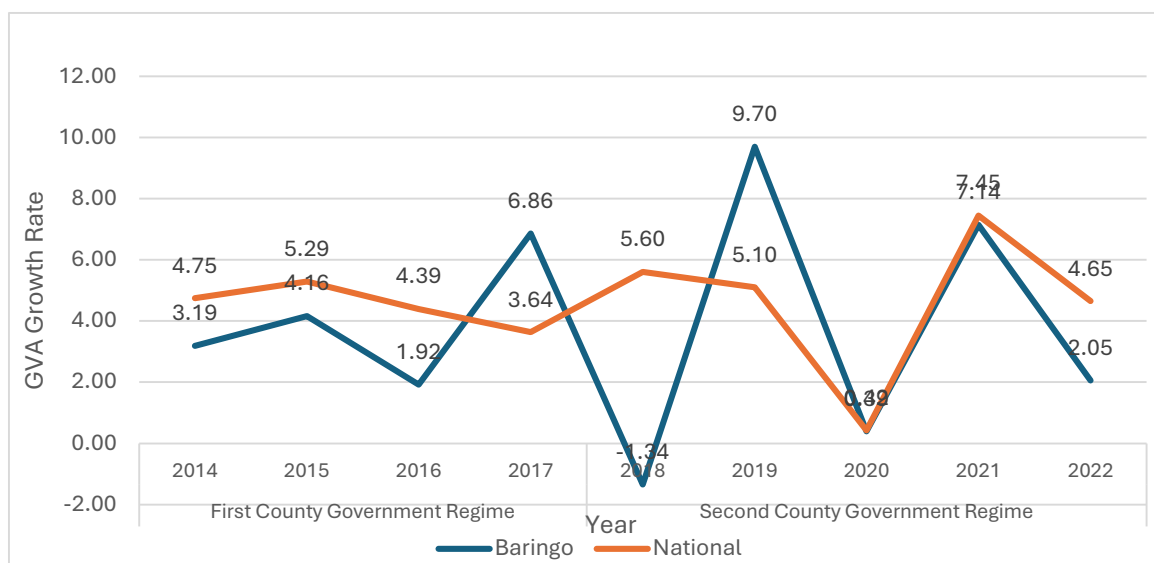
- (ii) Create an enabling environment for private sector growth by providing the essential infrastructure, including enhancing access to electricity, rural roads, improved water and financial services.
- (iii) Improve the quality of labour with nutritional programmes and promote 100 per cent secondary school transition rates.
- (iv) Exploit mining of the various minerals including fluor spar and manganese, which are critical minerals that can drive the country in the green transition.

Baringo County Economic performance

Baringo County contributes, on average, 0.8 per cent of the National Gross Value added with an average GVA size of Ksh 55,426.1 million. The GVA per capita for Baringo County is Ksh 93,710.33, with an average population growth of 2.5 per cent and overall poverty levels at 47.5 per cent.

The GVA growth for Baringo County was an average growth rate of 3.79 per cent from 2013-2022 as shown in Figure 1. The highest growth rate was experienced in 2019 while the lowest growth rate was experienced in 2018 and 2020 due to the COVID-19 pandemic.

Figure 1: Baringo County GVA growth rate

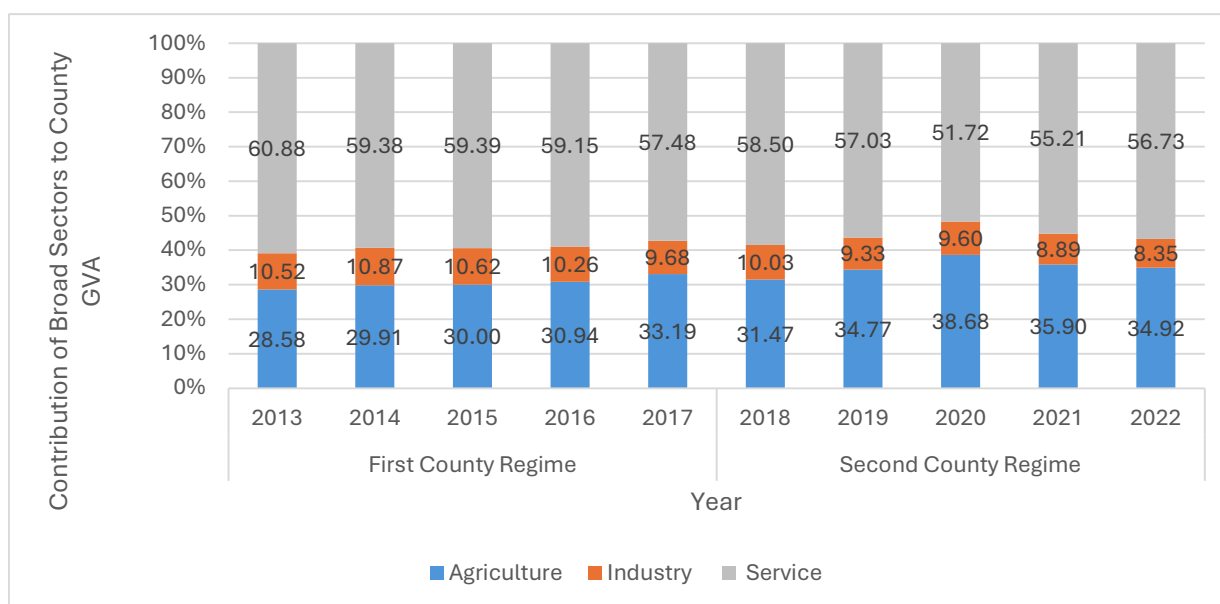


Data Source: KNBS 2023-Gross County Product

Sectoral Analysis of GVA

The services sector is dominant in Baringo County, with an average contribution to GVA of 57.55 per cent. The agriculture sector is second, contributing an average of 32.83 per cent to the GVA while the industry sector contributes only 9.81 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Baringo County GVA

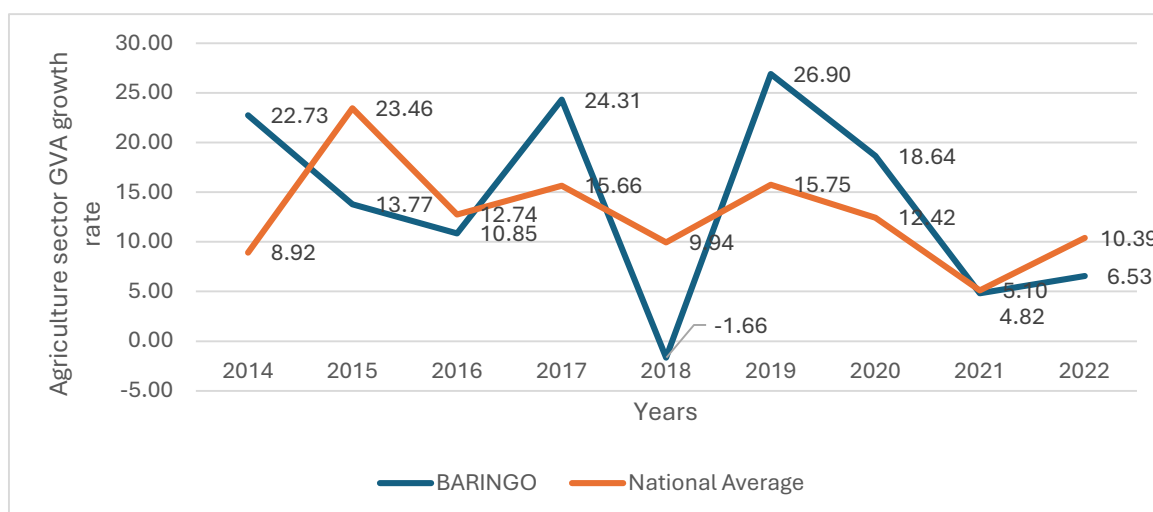


Data Source: KNBS 2023-Gross County Product

Agriculture Sector

The average Agriculture GVA growth rate (2013-2022) for Baringo County is 14 per cent, which is above the national average of 12.7 per cent.

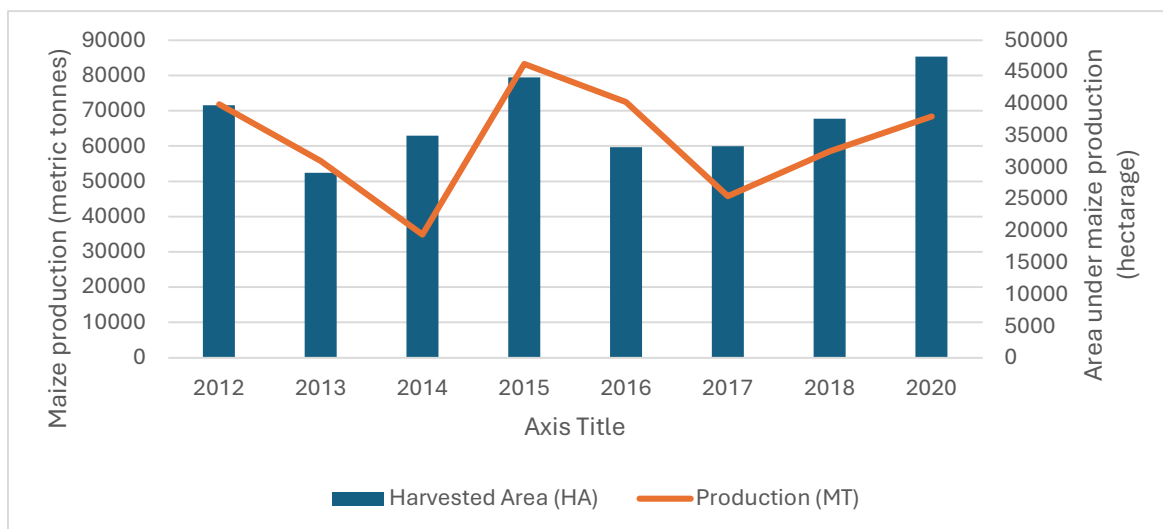
Figure 3: Baringo County agriculture GVA growth rate



Data Source: KNBS 2023-Gross County Product

Crop production, livestock production, apiculture and fisheries are important sub-sectors in Baringo County. Maize, the main staple food in the country, is also the main food crop produced in Baringo County. Both the area under maize production and maize production (metric tonnes) have been fluctuating over the years (Figure 3). This could be attributed to the higher aridity and frequent droughts that affect the lowland areas of the county.

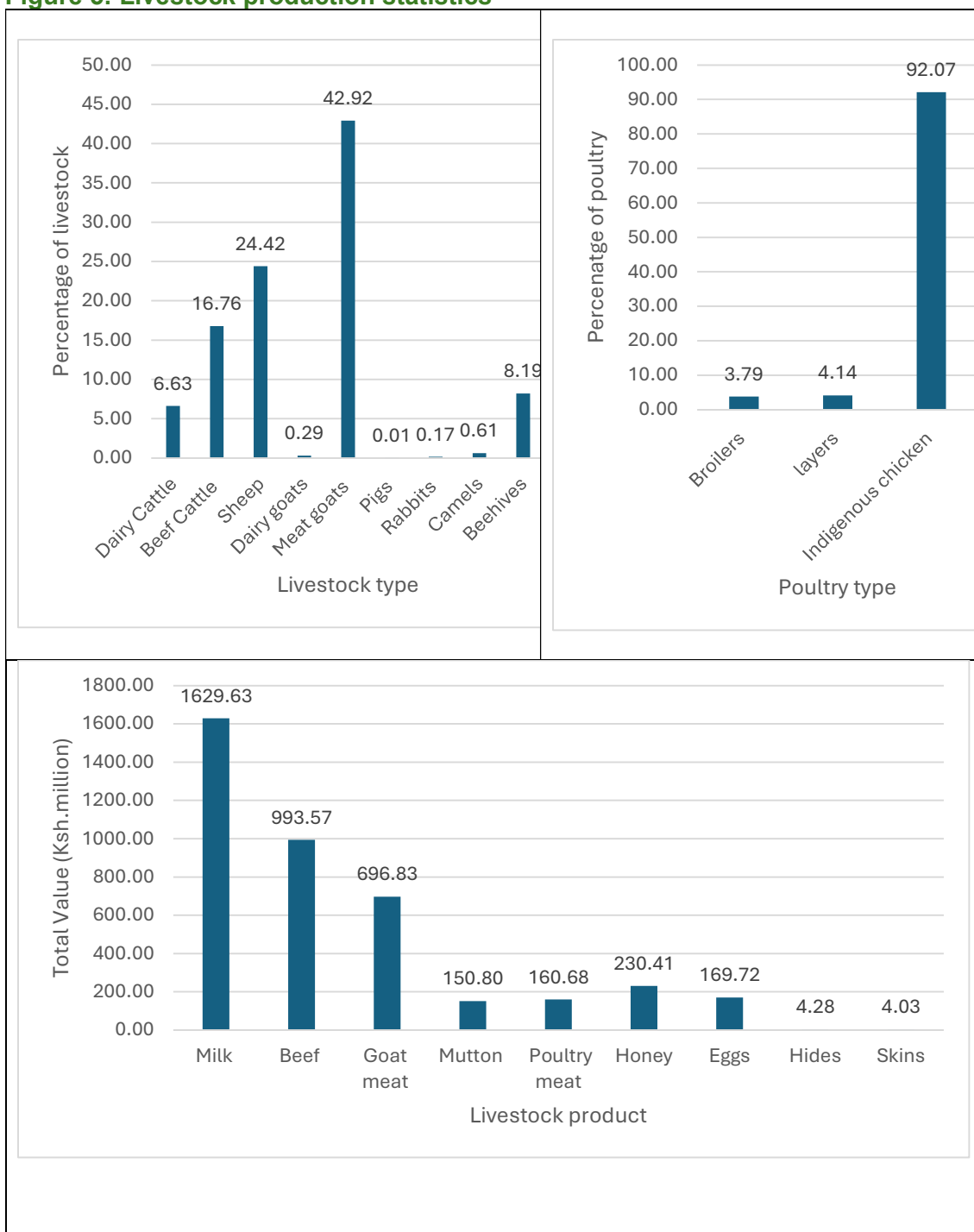
Figure 4: Maize production and area of maize harvested



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

Livestock production is equally significant in Baringo County. Mixed farming and pastoralism are widely practiced in the highlands and lowlands, respectively. The most common type of livestock kept are meat goats, sheep and beef cattle. Beehives are also significantly high as the county has advantages in honey production. Milk, beef and goat meat have the highest economic value among the livestock products. The value of marketed hides and skins is very low in the county despite the significant livestock production, indicating low integration into the leather value chain. The county also has potential for apiculture and poultry farming, and indigenous chicken is the most common poultry type.

Figure 5: Livestock production statistics

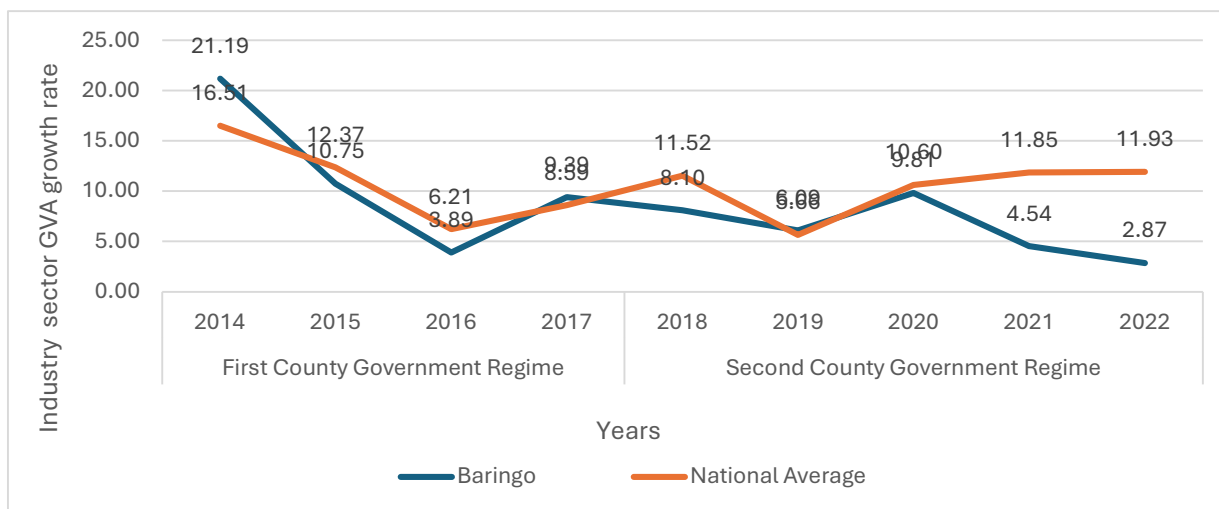


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The average Industry sector growth rate for Baringo County is 8.51 per cent, which is below the national average of 10.58 per cent as shown in Figure 7.

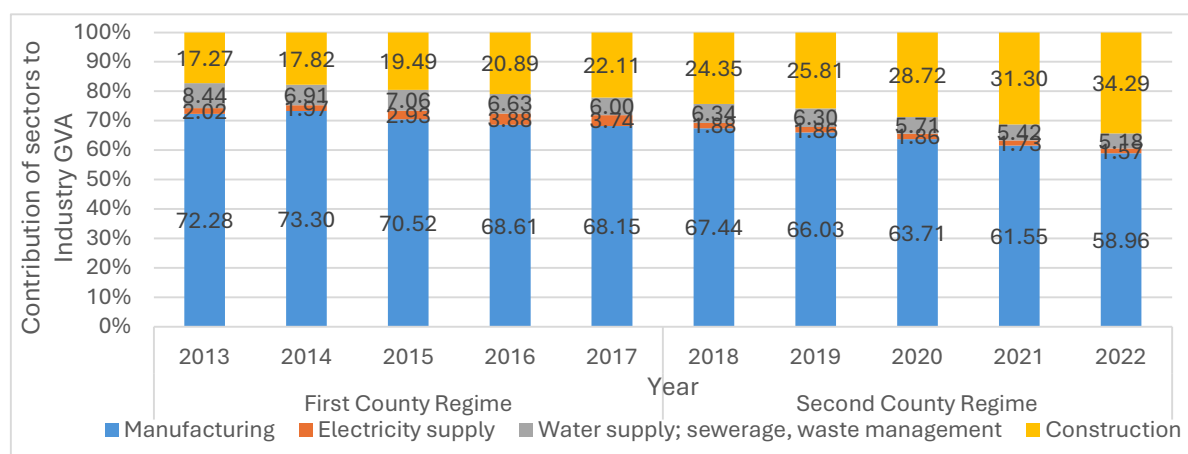
Figure 6: Baringo County industry GVA growth rate



Data Source: KNBS 2023-Gross County Product

Manufacturing is a key sector in Baringo County as it dominates the industry sector (Figure 7).

Figure 7: Contribution of industry sectors to industry GVA

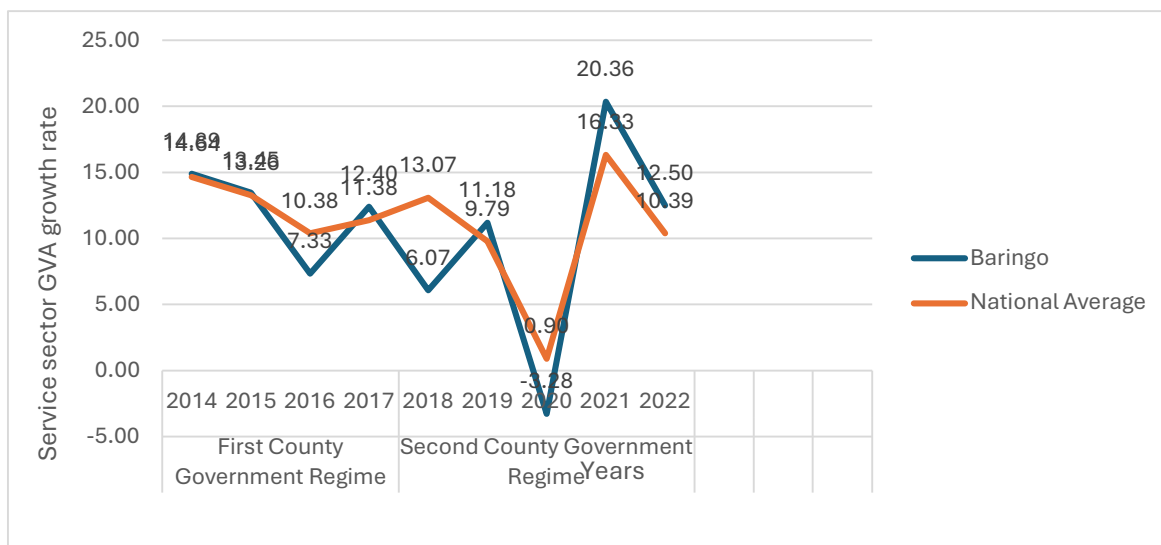


Data Source: KNBS 2023-Gross County Product

Services Sector

The average growth rates of the services sector is 10.39 per cent, which is below the national average of 11.13 per cent as shown in Figure 9.

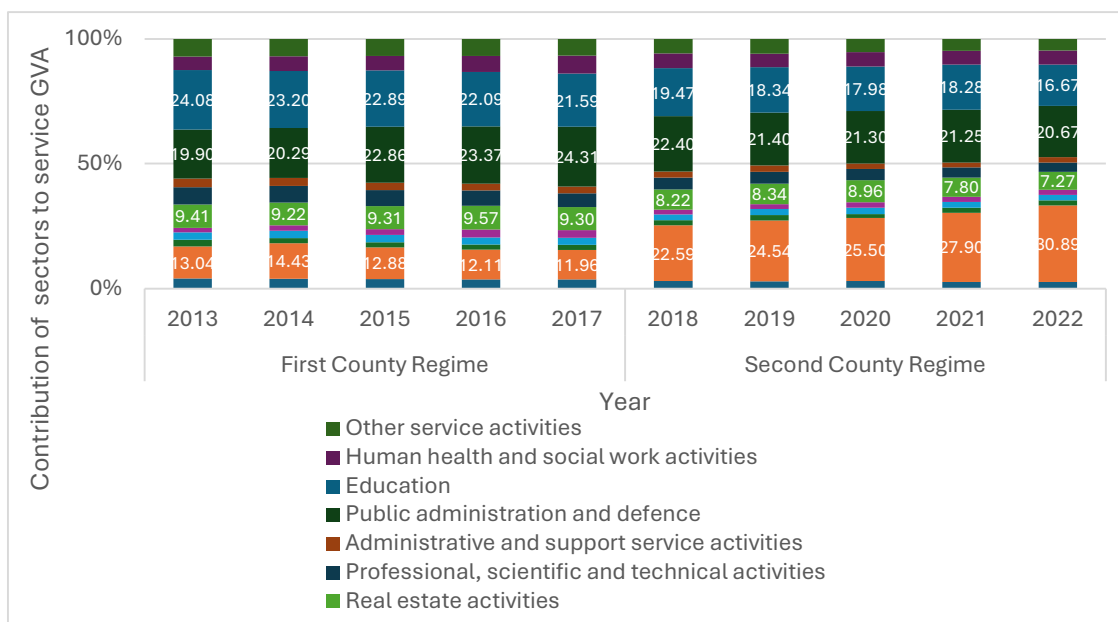
Figure 8: Baringo County services sector GVA growth rate



Data Source: KNBS 2023-Gross County Product

Transportation and storage services dominate the services sector, contributing the highest to the services GVA at an average of 24.31 per cent over the period under review. The public administration and defence sector is the second highest contributor to the services sector GVA at an average of 22.54 per cent, with the education sector following with an average of 12.69 per cent. The accommodation and food services activities contribute the least at an average of 0.45 per cent.

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



Data Source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force

Baringo County has a total working-age population of 344,824, which is about 51.72 per cent of the total county population. Most of the working-age population is youthful (18-34 years) at 51.35 per cent as shown in Table 1.

Table 1: Distribution of the working-age population by age categories

Working age population	Male	Female	Total	Per centage of Total Working age population (%)
Total	172,710	172,114	344,824	
15-17	27,725	25,102	52,827	15.32
18 –34	87,459	89,605	177,064	51.35
35-64	57,526	57,407	114,933	33.33

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

Most of the population in Baringo sub-counties are persons in the working age categories. Koibatek has the highest percentage of persons of working age at 57.38 per cent.

In all the sub-counties of Baringo County the youthful working ages 18-34 are the majority, with those from East Pokot dominating with the highest youthful working-age population. Tiaty East, Marigat, and Mogotio follow closely with 55.13 per cent, 52.54 per cent, and 51.28 per cent, respectively.

Table 2: Sub-county distribution of working-age population by age category

Sub- County	Working Age Population categories					Working age population (15-64) as a percentage of the total sub-county population
	Total Population	15-17	18 –24	25-34	35-64	
Baringo Central	96,949	7,707 (14.24)	13,317 (24.61)	13,701 (25.32)	19,390 (35.83)	54,115 (55.82)
Baringo North	104,869	8,230 (15.80)	12,589 (24.17)	12,166 (23.36)	19,104 (36.68)	52,089 (49.67)
East Pokot	79,921	6,284 (16.83)	11,300 (30.26)	10,290 (27.56)	9,469 (25.36)	37,343 (46.72)
Koibatek	129,533	10,122 (13.62)	18,283 (24.60)	18,532 (24.93)	27,387 (36.85)	74,324 (57.38)
Marigat	90,952	6,905 (15.45)	11,619 (26.00)	11,863 (26.55)	14,303 (32.00)	44,690 (49.14)
Mogotio	91,102	7,355 (15.17)	12,949 (26.71)	11,914 (24.57)	16,264 (33.55)	48,482 (53.22)
Tiaty East	73,424	6,224 (18.42)	9,909 (29.33)	8,632 (25.55)	9,016 (26.69)	33,781 (46.01)

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

Baringo County has high socio-economic indicators that affect the quality of labour. However, interventions are required to increase secondary school enrolment, reduce stunting and teenage pregnancies, tackle food and child poverty (Table 3).

Table 3: Human capital indicators

Human Capital Indicators	County	National Average
Literacy rate	83.60	78.41
Pre-primary net enrolment rate (2019)	63.48	67.51
Primary school net enrolment rate (2020)	78.30	77.72
Secondary school net enrolment rate (2020)	52.20	54.18
Average years of schooling (2014)	7.90	7.78
Percentage of children 12-23 months fully vaccinated (%)	69.40	74.97
Percentage of stunted children	21.20	19.75
Percentage of teenage pregnancy	20.30	15.79
Primary to secondary transition rates (2020)	86.40	86.13
Pupil teacher ratio (primary school)	23.00	28.28
Food poverty head count (%)	33.90	33.63
Child Poverty head count (%)	50.80	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- The Kenya Poverty Report

Some of the essential infrastructure and capital indicators that support production of county output in Baringo County are higher than the national average. However, interventions are required to increase electricity and Internet connectivity, improve rural roads, increase access to improved water and expand 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)	28.30	38.52
Distribution of population using the Internet (2019 census)	15.30	18.69
Rural Access Index (2018)	49.04	63.72
Access to improved sanitation (2018)	71.00	59.04
Access to improved water (2018)	48.40	65.33
Financial inclusion level (2021)	74.90	81.01
The proportion of primary schools with Internet	20.10	27.65
Proportion of secondary schools with functional Internet	30.10	35.13
Percentage of households by housing material composite-finished materials (adequate) (2019)	52.71	51.71
Percentage of households by bank usage (overall)	41.00	38.18
Percentage of Households using Mobile Money	72.40	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 for Baringo County is at 63.56 per cent, with most of those working being the youthful working population of ages 18-34 years at about 32.41 per cent while those between ages 35-64 years are at 28.34 per cent. The percentage of the employed by gender is 40.32 per cent for males and 41.73 per cent for females. The unemployment rate is at 5.14 per cent, with unemployment being slightly higher for the youth (18-34 years) at 5.30 per cent and those between 35-64 years at 2.30 per cent. The percentage of persons 5-17 years old working is 7.85 per cent. The inactivity rate for the youth (15-24 years) is at 22.41 per cent, which is expected as most are pursuing education while that of the prime age (25-64 years) is at 5.06 per cent as shown in Table 5 below.

Table 5: Baringo County employment statistics

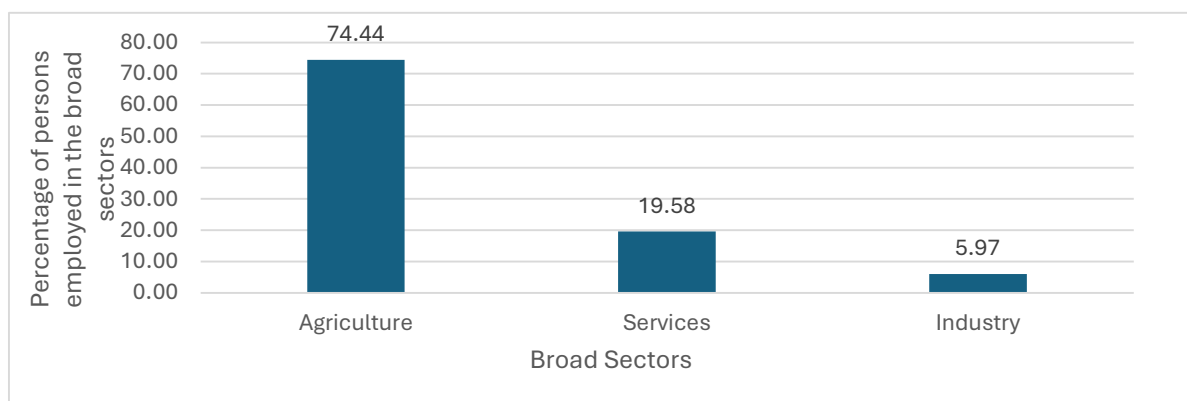
Employment Statistics	Youth	Non youth
Employment to population ratio (%)	32.41	28.34
Unemployment rate	5.30	2.30
Percentage of persons 5-17 years old working	7.85	-
Inactivity rate	22.41	5.06

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

Sectoral Employment

The agriculture sector is the highest employer in Baringo County at 74.44 per cent followed by the services sector at 19.58 per cent, while the industry sector has the lowest employment shares at 5.97 per cent as shown in Figure 11.

Figure 10: Percentage of persons employed in the broad sectors

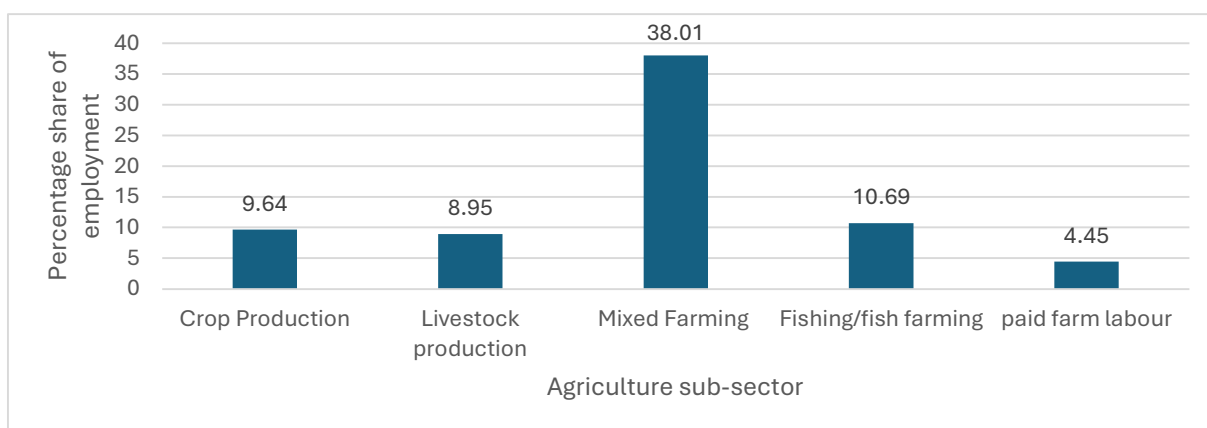


Data Source: KNBS 2021- Kenya Continuous Household Survey

Agriculture sector employment

In agriculture, the majority are those practicing mixed farming as crop-dairy farming and agro-pastoralism are the common farming systems in the county.

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

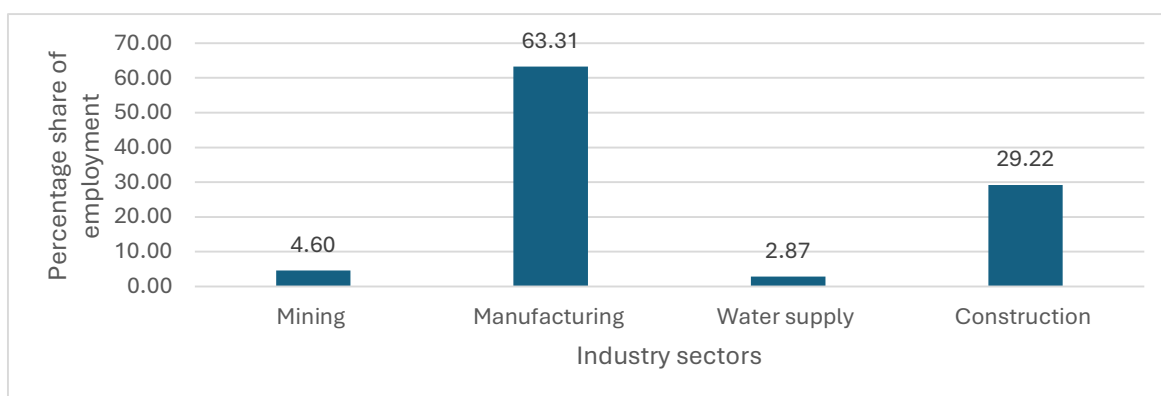


Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry sector Employment

The majority of those working in the industry sectors are in manufacturing, followed by the construction sector as indicated in Figure 13 below.

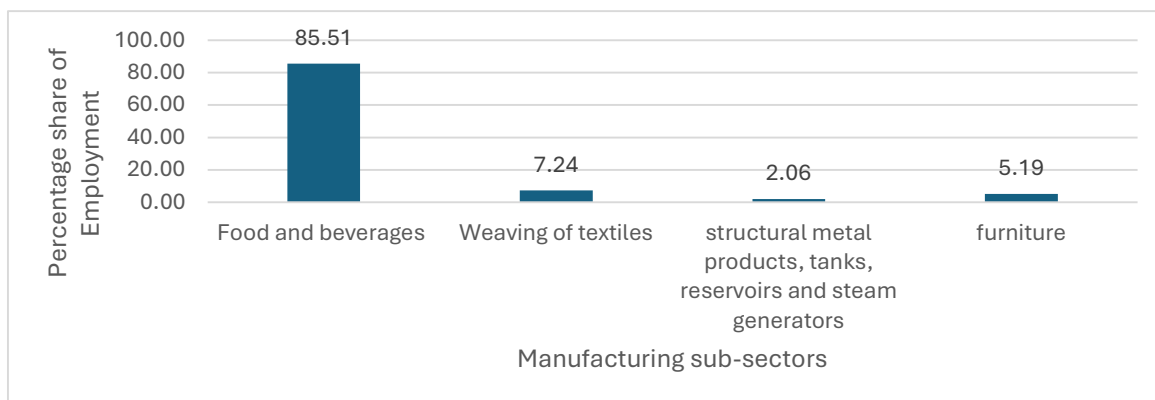
Figure 12: Percentage share of employment in the industry sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

A disaggregation of employment in manufacturing shows that most of those employed in the sector work in low-technology manufacturing sub-sectors such as manufacture of food products and textile industries as shown in Figure 14. These sectors heavily depend on the agriculture sector for raw materials.

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

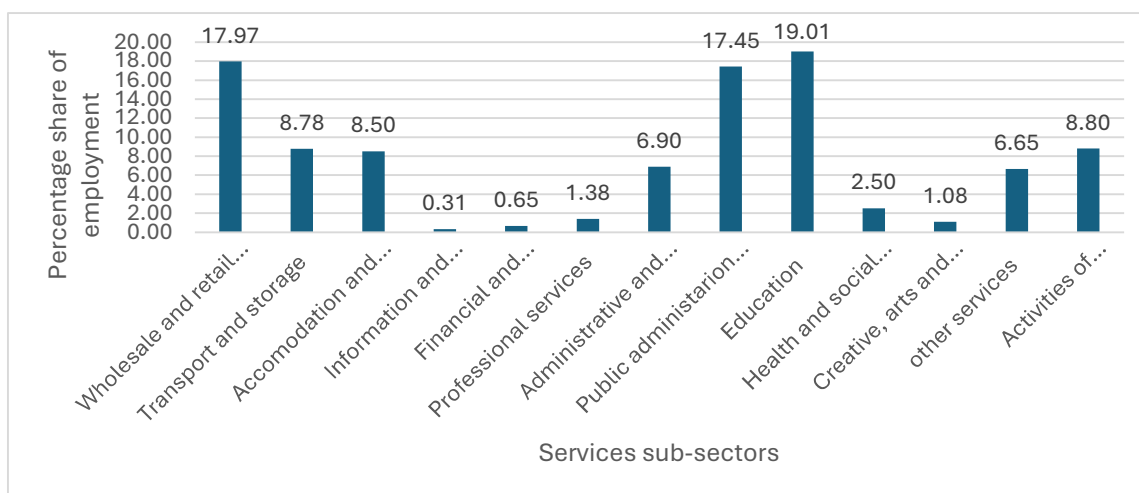


Data Source: KNBS 2021- Kenya Continuous Household Survey

Services Sector Employment

Most of those working in the services sector work in the education sector, followed by wholesale and retail trade (Figure 14).

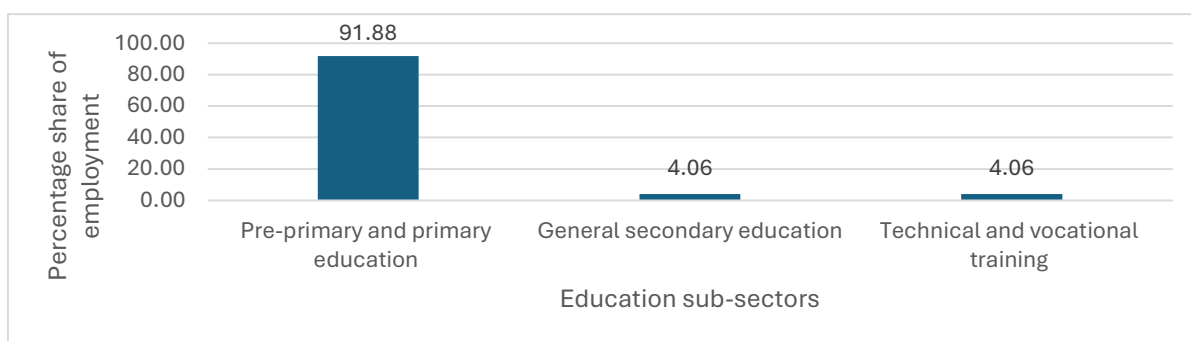
Figure 14: Percentage share of employment in the services sector



Data Source: KNBS 2021- Kenya Continuous Household Survey

In the education sector, most people work in the pre-primary and primary education sub-sector (Figure 15).

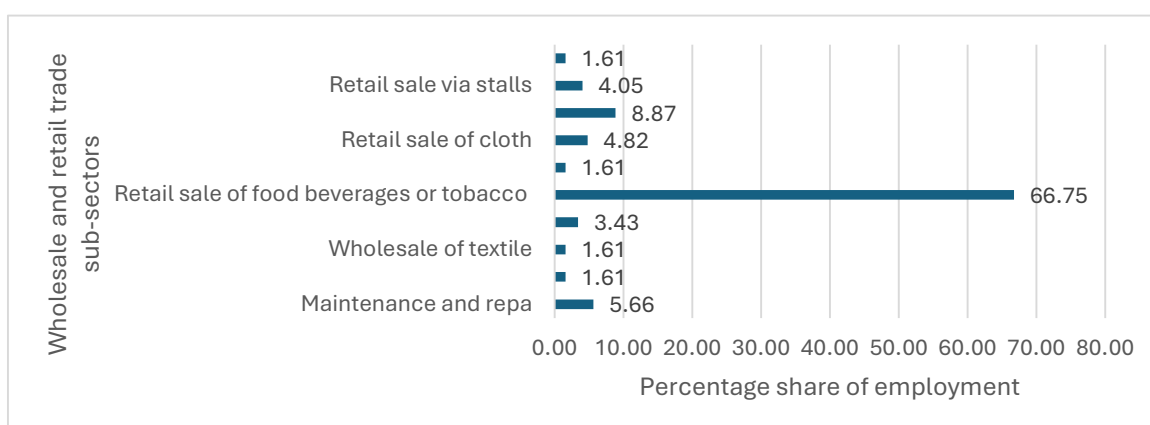
Figure 15: Percentage share of employment in the education sub-sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

In the wholesale and retail trade, and repair of motor vehicle sector, most people work in the retail of food, beverages, and tobacco products as shown in Figure 16. This indicates linkages with the agriculture and manufacturing sectors as they serve as an intermediary between the sectors and the consumers.

Figure 16: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors



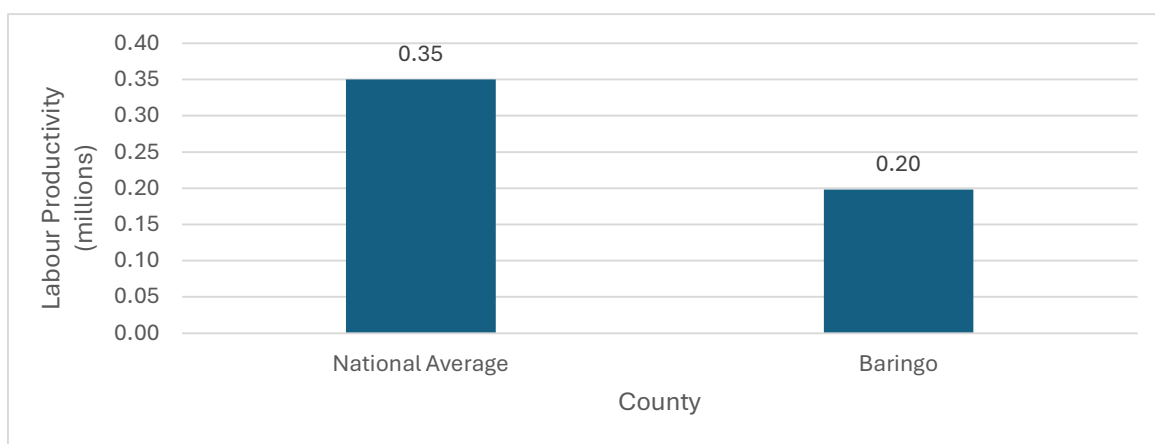
Data Source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

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

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

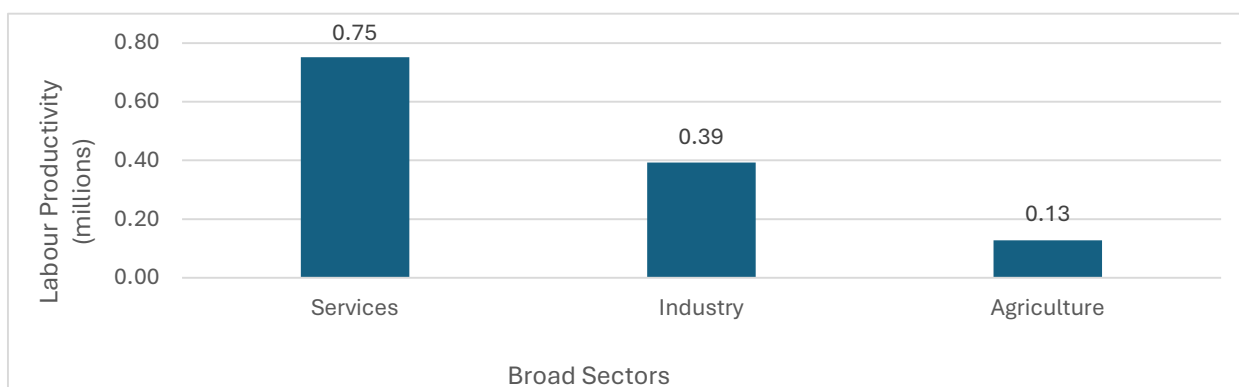
Figure 17: Labour productivity ratios (millions)



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

In Baringo County, the services sector has the highest labour productivity. The industry sector follows while agriculture had the lowest labour productivity as shown in Figure 18 below.

Figure 18: Labour productivity by sectors

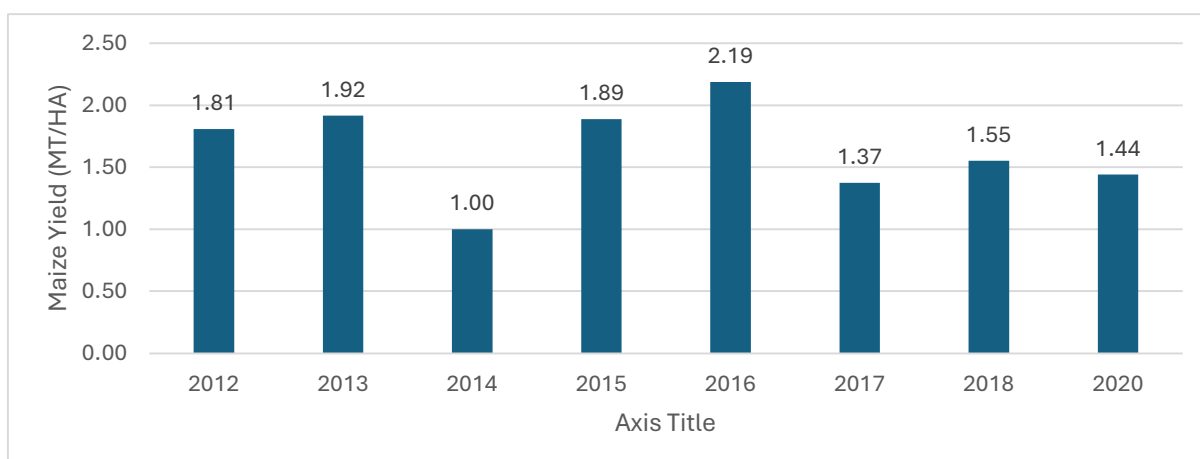


Data Source: Author's computation using KNBS 2023 Gross County Product 2023 and KNBS 2021- Kenya Continuous Household Survey

Agriculture Productivity

In agriculture, maize productivity has fluctuated over the years, with an average yield of 1.65 MT/HA. The lowest labour productivity was in 2014 while the highest was in 2016 (Figure 19).

Figure 19: Maize yield (MT/HA)

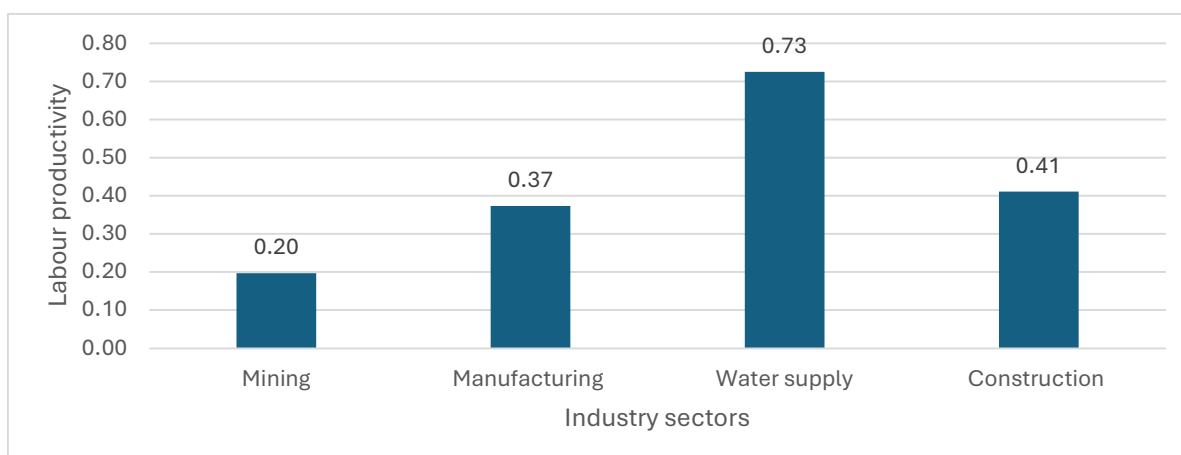


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector Labour Productivity

The water supply sector and the construction sector have the highest labour productivity among the sectors in the services broad sector (Figure 20).

Figure 20: Labour productivity by industry sectors

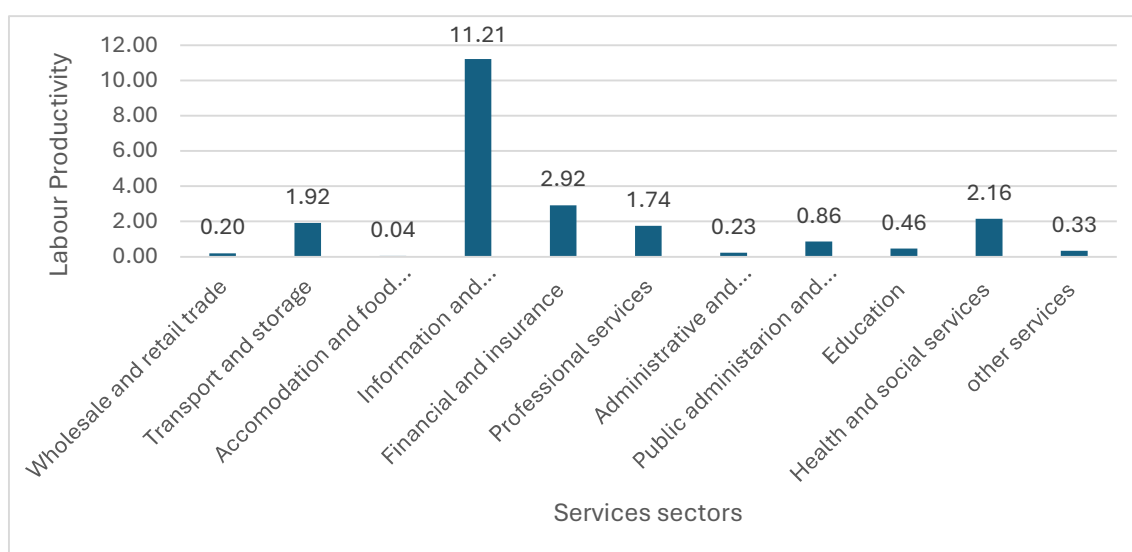


Data Source: Author's computation using KNBS 2023 Gross County Product 2023 and KNBS 2021- Kenya Continuous Household Survey

Services sector labour productivity

The information and communication sub-sector relatively higher labour productivity when compared with other sub-sectors within the services sector. The wholesale and retail trade sector, which had the highest employment in the services sector, had the second lowest labour productivity as observed in Figure 21.

Figure 21: Labour productivity in the services sectors



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

Key Messages

- (i) The services sector is dominant in Baringo County GVA while the industry sector has the least share. Crop production is affected by droughts and aridity. There is low integration of livestock production into the leather value chain despite the comparative advantages in livestock production. Manufacturing has the highest share of industry, and the county has mineral deposits including fluor spar, gold, manganese and iron ore. Transportation and storage services dominate the services sector.
- (ii) The indicators of quality of labour are within national averages. However, interventions are required to increase secondary school enrolment, reduce stunting and teenage pregnancy, and tackle food and child poverty.
- (iii) Some of the essential infrastructure and capital indicators that support production of county output are higher than the national average. However, interventions are required to increase access to electricity, Internet connectivity, rural roads, improved water and financial services.
- (iv) The agriculture sector is the highest employer, with most people practising mixed farming. Most of those working in the industry sectors are in manufacturing, with employment concentrated in the manufacture of food and beverages sub-sectors. Most of those working in the services sector work in the education sector, followed by the wholesale and retail trade sector.
- (v) Labour productivity is lower than the national average. The services sector has the highest labour productivity while agriculture had the lowest labour productivity.

Policy Recommendations

- (i) Build climate resilience in the livestock sub-sector by increasing the uptake of weather-based insurance schemes for livestock production by promoting the use of asset-backed insurance and subsidizing premiums for disadvantaged

pastoralists. Create awareness of the use of the information from the drought early warning systems.

- (ii) Further, integrate livestock production into the leather value chain. This can be achieved by commercializing the supply of hides and skins and creating awareness on the value of hides and skins, increasing extension services to improve the quality of hides and skins, and facilitating aggregation and pooled sales of hides and skins to increase producers' bargaining power. This could go in tandem with efforts to increase the number of leather processing facilities by providing incentives to local leather product manufacturers to establish tanneries in arid counties.
- (iii) Create an enabling environment for private sector growth by providing the necessary essential infrastructure, including enhancing access to electricity, rural roads, access to improved water and financial inclusion.
- (iv) Improve the quality of labour by focusing on nutritional programmes to reduce stunting, integrate social protection programmes that address child poverty, and encourage children enrolment and teenage mothers to go back to school. Also, there is need to prioritize the implementation of 100 per cent secondary school transition rates to enable acquisition of skills.
- (v) The County could exploit mining of the various minerals that will help to grow the industry sector. Fluorspar and manganese are critical minerals that drive the country in the green transition.

Acknowledgement

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