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Assessing Labour Productivity for Kilifi County

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Overview of the County

Kilifi County is a member of the Jumuiya ya Kaunti za Pwani (JKP) economic bloc. The county is classified as a semi-arid county, experiencing 30-84 per cent aridity levels. Kilifi County covers an area 12,610 km² and four Sub-Counties namely: Chonyi, Ganze, Kaloleni, Kauma, Kilifi North, Kilifi South, Magarini, Malindi, and Rabai.

Key Highlights

The productivity of Kilifi County is characterized by the following:

- (i) The service sector dominates county gross value added while agriculture has the least share. Dairy farming is gaining traction and there is potential for apiculture and poultry farming. The manufacturing sub-sector has the highest share in industry sector, but it is declining while transportation and storage sector dominate the services sector.
- (ii) The quality of labour requires reducing stunting, teenage pregnancies, food and child poverty and increase secondary school enrolment rate and immunisation of children.
- (iii) The essential infrastructure requires increase in access to electricity, internet connectivity, improved rural roads and financial inclusion.
- (iv) The agriculture sector is the highest employer mainly mixed farming and crop production. In manufacturing employment is in food products, textile and wearing apparel and wood products. In wholesale and retail trade, majority is in retail trade not in stores, stalls or markets.
- (v) Labour productivity is highest in the service sector while the agriculture sector has the lowest labour productivity. There is potential for maize productivity.

To enhance productivity:

(i) Build climate resilience in agriculture by encouraging drought resistant fast maturing crops, increased uptake of crop insurance, use information from the

early warning systems to inform crop production, and integrate livestock value chains.

- (ii) Secure quality of future labour by implementing nutrition sensitive programmes, creating awareness and supporting teenage mothers to go back to school, and encourage secondary school transition rates.
- (iii) Invest in essential infrastructure including electricity, internet connectivity, rural roads and financial inclusion.
- (iv) Take advantage of sisal production in meeting the demand for use of bio-gradable bags.
- (v) Exploit the critical minerals in the county to support the green transition.

Kilifi County Economic Performance

Kilifi County contributes on average to 2.2 per cent of the National Gross Value added with an average GVA of Ksh 156,6373 million. The GVA per capita for Kilifi County is Ksh 107,746.18 with an average population growth of 2.1 per cent and overall poverty levels at 49.2 per cent.

Kilifi County has shown a steady growth in GVA with an average growth rate of 4.05 per cent in 2013-2022, which is slightly lower than the national average growth of 4.37 per cent. The highest growth rate was in 2021 as shown in Figure 1.

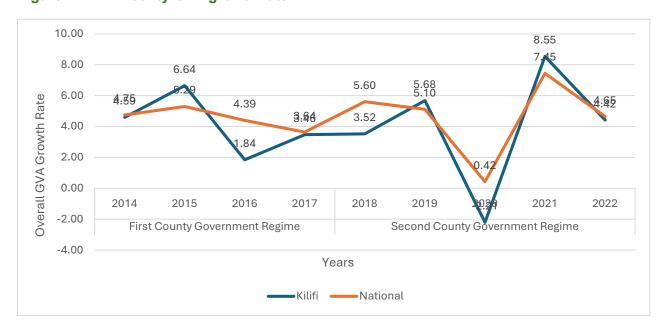


Figure 1: Kilifi County GVA growth rate

Data Source: KNBS 2023-Gross County Product

Sectoral Contribution to County Gross Value Added

The services sector is dominant in Kilifi County with an average contribution to GVA of 55.05 per cent. The industry sector is second, contributing an average of 27.11 per cent to the GVA while agriculture contributes about 17.98 per cent as shown in Figure 2.

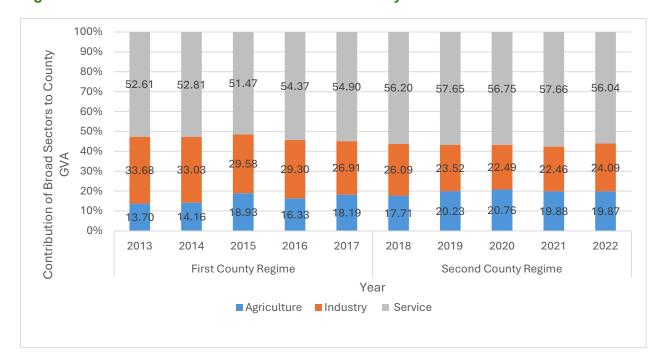


Figure 2: Contribution of broad sectors to Kilifi County GVA

Data Source: KNBS 2023-Gross County Product

Agriculture Sector

The average growth rate of agriculture GVA in 2013-2022 is 15.59 per cent, which is above the national average of 12.71 per cent. The growth rate, however, showed an erratic trend, the highest growth rate being in 2015 at 51.59 per cent, while the highest decline in 2016 at -8.85 per cent as shown in Figure 3.



Figure 3: Kilifi County agriculture GVA growth rate

Data Source: KNBS 2023-Gross County Product

Despite its lower share of county GVA, the agriculture sector is an important source of livelihood in Kilifi County with mix crop-livestock and crop production being the main

farming systems. The main food crops grown for subsistence include maize, cowpeas, green grams, and cassava while cash crops include coconuts, cashew nuts and sisal among others. Maize, the main staple food in the country is also the most common food crop grown in Kilifi County. The area under maize production has been relatively constant except in 2015 which was higher. Maize production (metric tonnes) also showed constant trend and has mainly been low except in 2015 which had higher production.

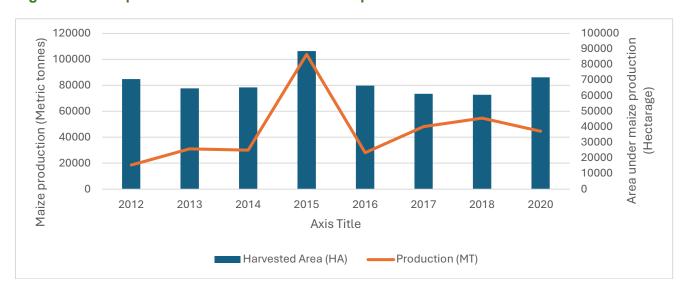
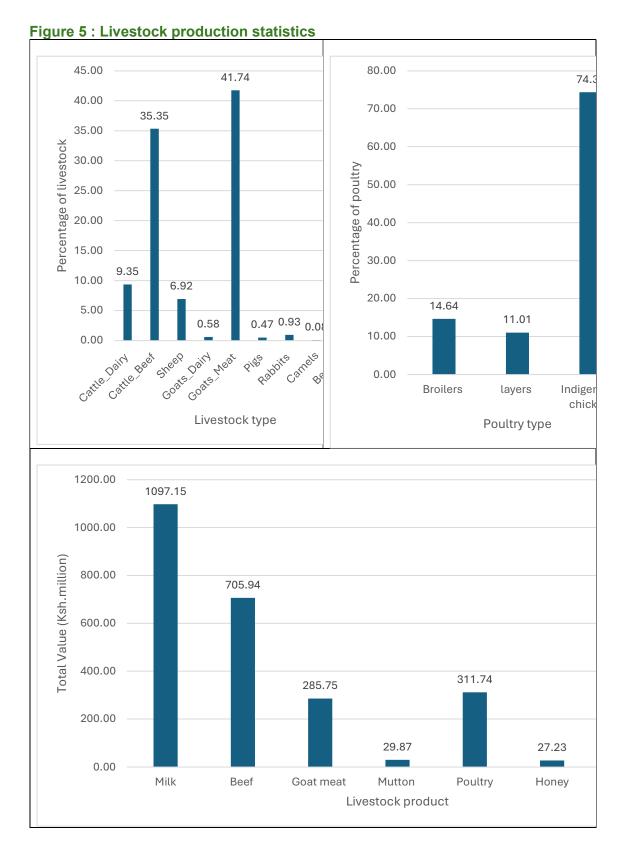


Figure 4: Maize production and area under maize production

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

Livestock production is an equally important source of livelihood in Kilifi County. The most common livestock kept being beef cattle, and meat goats. Dairy farming is gaining traction in the county as dairy cattle are also common. The county also has potential for honey production as seen by the significant numbers of beehives. Poultry farming is commonly practiced and is moderately diversified, indigenous chicken being the most common type of poultry kept (Figure 5). Milk and beef have the highest economic values; eggs and poultry meat also have high values indicating the potential in poultry farming.



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

Industry Sector

The average growth rate of the industry sector is 6.10 per cent, which is below the national average of 10.58 per cent as shown in Figure 6.

25.00 18.93 Industry sector GVA growth 16.51 20.00 14.73 12.37 11.93 11.52 15.00 11.1 10.60 8.59 10.00 5.91 6:21 4:65 5.66 1.57 5.00 1.08 -0.42 -2.6 0.00 2014 2015 2016 2018 2021 2022 2019 -5.00 First County Government Regime Second County Government Regime Years -Kilifi National Average

Figure 6: Kilifi County industry GVA growth rate

Data Source: KNBS 2023-Gross County Product

The manufacturing sector has the highest share of industry GVA at 87-91 per cent in the 10 years under review (Figure 7). Key manufacturing firms in the county include those producing salt, cement and steel, among others.

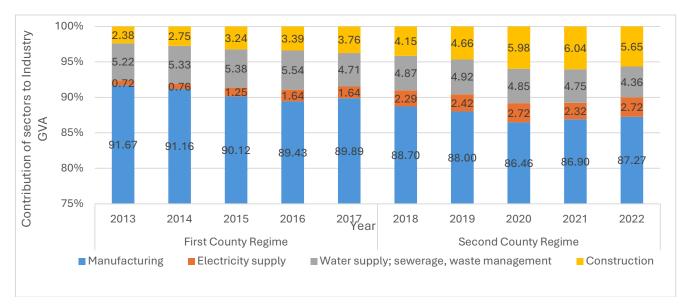


Figure 7: Contribution of industry sub-sectors to the industry sector GVA

Data Source: KNBS 2023-Gross County Product

Services Sector

The average growth rate of services sector is 9.69 per cent, which is below the national average of 11.13 per cent as shown in Figure 8.

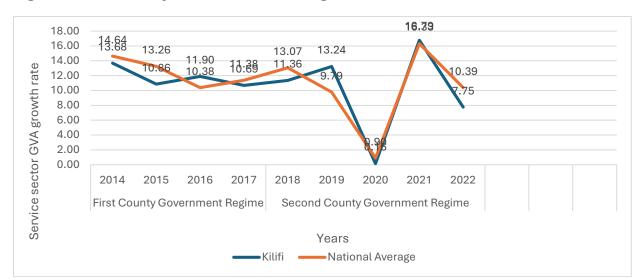


Figure 7: Kilifi County services sector GVA growth rate

Data Source: KNBS 2023-Gross County Product

The transportation and storage sub-sector dominates the services sector with the highest contribution to service GVA at 23.40 per cent. The real estate activities sub-sector is the second highest contributor to services GVA at 16.86 per cent as shown in Figure 9. Public administration and defence is third at an average of 12.89 per cent.

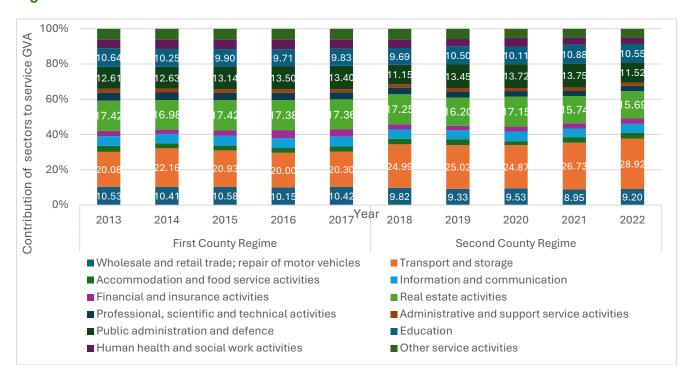


Figure 9: Contribution of sub-sectors to service sector GVA

Data Source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force in Kilifi County

Kilifi County has a total of 784,069 working-age population, which is about 53.93 per cent of the total county population. Most of the working-age population is youthful (18-34 years) at 51.96 per cent as shown 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	54,689	53,445	108,134	13.79
18 –24	96,263	103,344	199,607	25.46
25-34	92,912	114,910	207,822	26.51
35-64	128,031	140,475	268,506	34.25
Total	371,895	412,174	784,069	

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

Most of the population in Kilifi sub-counties are persons in the working age categories. Kilifi South has the highest percentage of working-age persons at 59.45 per cent as shown in Table 2.

Table 2: Sub-County land area distribution of working age population by age

category

Sub- County	Total population	Working age population categories			Working age population (15-64) as a	
		15-17	18 –24	25 –34	35-64	percentage of the total sub-county population
Chonyi	62,334	5,264 (17.26)	7,980 (26.17)	6,397 (20.98)	10,855 (35.59)	30,496 (48.92)
Ganze	143,902	12,568 (18.55)	17,129 (25.28)	14,597 (21.54)	23,468 (34.63)	67,762 (47.09)
Kaloleni	193,677	14,768 (14.88)	24,270 (24.45)	25,422 (25.61)	34,815 (35.07)	99,275 (51.26)
Kauma	22,638	2,002 (17.30)	3,109 (26.86)	2,499 (21.59)	3,965 (34.25)	11,575 (51.13)
Kilifi North	178,822	12,430 (12.24)	26,834 (26.41)	28,452 (28.01)	33,873 (33.34)	101,589 (56.81)
Kilifi South	206,749	13,386 (10.89)	31,514 (25.64)	37,638 (30.62)	40,376 (32.85)	122,914 (59.45)
Magarini	191,610	15,580 (16.60)	24,968 (26.61)	22,264 (23.73)	31,017 (33.06)	93,829 (48.97)
Malindi	333,217	23,302 (12.28)	47,663 (25.11)	53,617 (28.25)	65,242 (34.37)	189,824 (56.97)
Rabai	120,813	8,834 (13.22)	16,140 (24.16)	16,936 (25.35)	24,895 (37.27)	66,805 (55.30)

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

Kilifi County has high performance in socioeconomic indicators that affect the quality of labour. However, interventions are required to reduce stunting, teenage pregnancies, food and child poverty and to increase secondary school enrolment rates as shown in Table 3.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	80.10	78.41
Pre-primary net enrolment rate (2019)	69.95	67.51
Primary school net enrolment rate (2020)	78.80	77.72
Secondary school net enrolment rate (2020)	30.90	54.18
Average years of schooling (2014)	6.70	7.78
Percentage of children 12 -23 months fully vaccinated (%)	74.10	74.97
Percentage of stunted children	37.00	19.75
Percentage of teenage pregnancy	12.50	15.79
Primary to secondary transition rates (2020)	81.40	86.13
Pupil-teacher ratio (primary school)	35.00	28.28
Food poverty head count (%)	41.40	33.63
Child poverty head count (%)	49.10	42.67

Source: KNBS (2022), Kenya Demographic and Health Surbey - 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

Some of the essential infrastructure and capital indicator in Kilifi County performed higher than the national average (Table 4). However, interventions are required to increase electricity and internet connectivity, improve rural roads and enhance financial inclusion.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census	38.50	38.52
Distribution of population using the Internet (2019 census)	15.10	18.69
Rural Access Index (2018)	34.70	63.72
Access to improved sanitation (2018)	70.00	59.04
Access to improved water (2018)	78.40	65.33
Financial inclusion level (2021)	74.40	81.01
The proportion of primary schools with Internet	33.85	27.65
Proportion of secondary schools with functional internet	50.00	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	52.99	51.71
Percentage of households using bank usage (overall)	29.40	38.18
Percentage of households using mobile money	73.20	78.58

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

Quantity and Quality of Labour Force in Kilifi County

Employment to population ratio is at 59.74 per cent. Most of those working is the youthful (18- 34 years) at about 31.07 per cent while those 35-64 at 27.68 per cent. The percentage of the employed by gender is 35.25 for male and 38.18 for female. The

unemployment rate is at 9.59 per cent with unemployment being slightly higher for the youth (18-34 years) at 6.23 per cent and those in 35-64 years at 3.14 per cent.

The percentage of persons 5–17 years old working is 9.86 per cent indicating that the county has low levels of child labour. The inactivity rate for the youth (15-24 years) is at 23.48 per cent which is expected as most are pursuing education while that of the prime age (25-64 years) is at 5.96 per cent as shown in Table 5.

Table 2: Kilifi County employment statistics

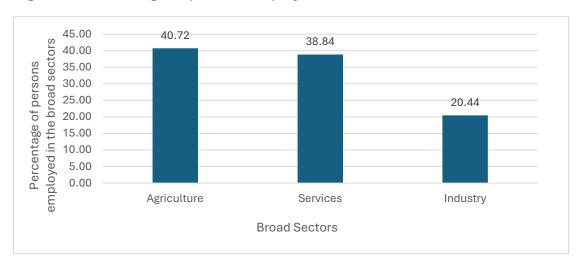
Employment statistics	Youth	Non youth
Employment to population ratio (%)	31.07	27.68
Unemployment rate	6.23	3.14
Percentage of persons 5–17 years old working	9.86	-
Inactivity rate	23.48	5.96

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

Sectoral Employment

The agriculture sector is the highest employer in Kilifi County at 40.72 per cent followed by the services sector at 38.84 per cent. The industry sector is third at 20.44 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

Mixed farming and crop production dominates the share of employment in agriculture sector (Figure 11).

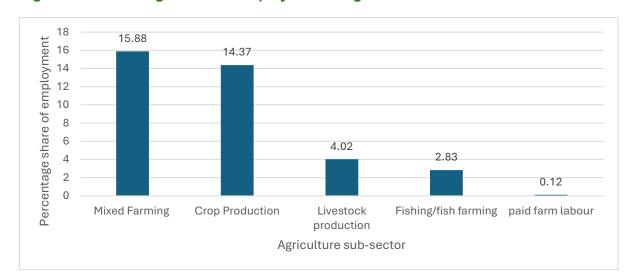


Figure 11: Percentage share of employment in agriculture sub-sectors

Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector employment

The construction and manufacturing sub-sectors dominate the share of employment in the industry sector. The construction of buildings sub-sector has the highest share of employment as shown in Figure 12.

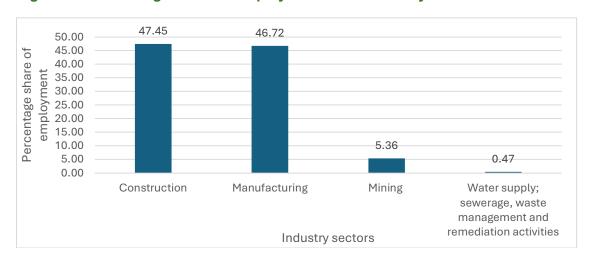


Figure 12: Percentage share of employment in the industry sectors

Data Source: KNBS 2021- Kenya Continuous Household Survey

The county has a diversified the manufacturing sub-sector. A disaggregation of employment shows that the majority of those employed work in low-technology manufacturing sub-sectors such as agro-processing and textile industries as shown in Figure 13.

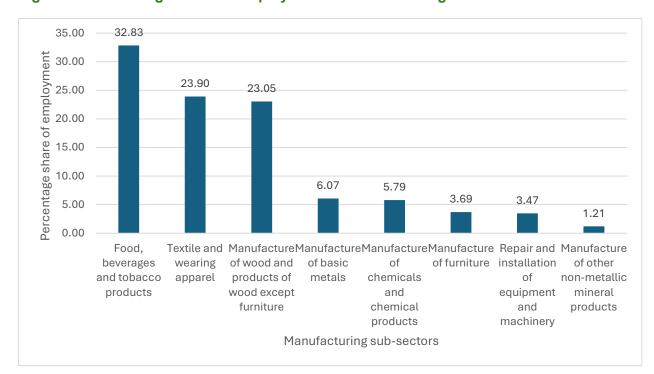


Figure 13: Percentage share of employment in manufacturing sub-sectors

Data Source: KNBS 2021- Kenya Continuous Household Survey

Services Sector Employment

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

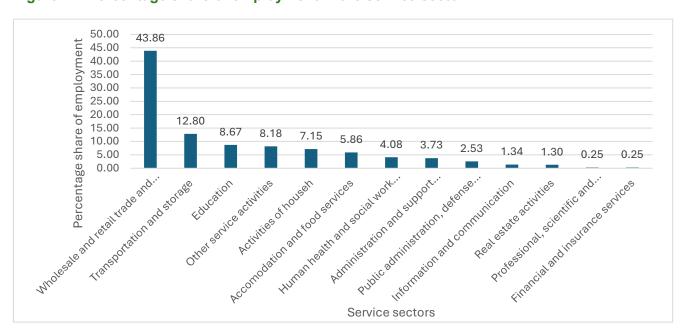
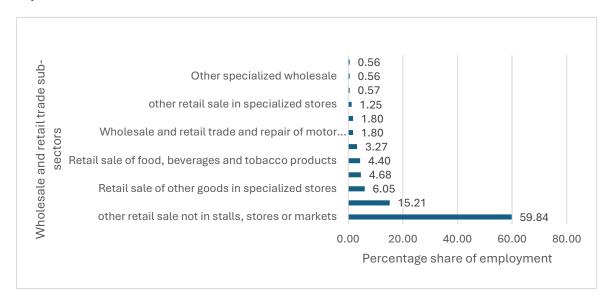


Figure 14: Percentage share of employment in the service sector

Data Source: KNBS 2021- Kenya Continuous Household Survey

In the wholesale and retail trade, and repair of motor vehicles and motorcycles subsector, the majority work in retail trade not in stores, stalls or markets (Figure 15).

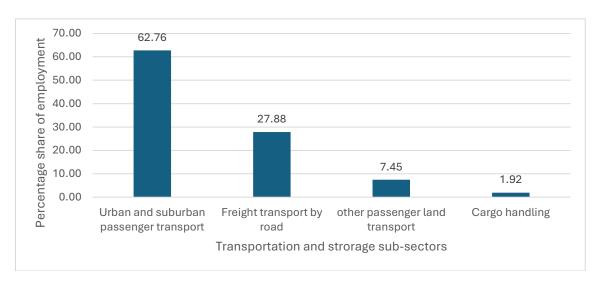
Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

In the transportation and storage 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 subsectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity¹ for Kilifi County is lower than the national average as shown in Figure 17.

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

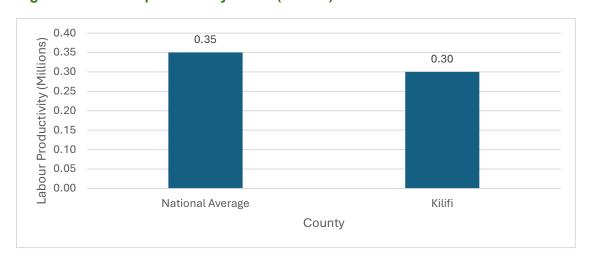


Figure 17: Labour productivity ratios (million)

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 has the lowest labour productivity (Figure 18).

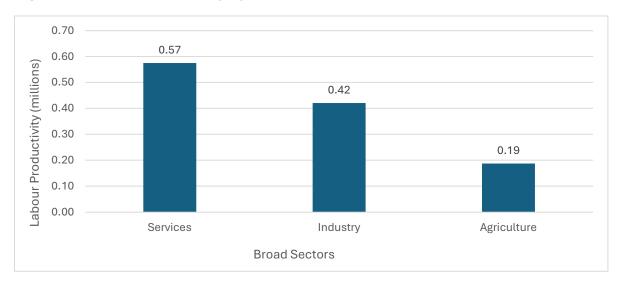


Figure 18: Labour productivity by sectors

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

Agriculture Productivity

Maize productivity measured by maize yield is low at an average of 0.64 MT/HA for the 8 years under review. The maize yields have also been fluctuating, with the highest yield being in 2015 (Figure 19).

1.40 1.17 1.20 Maize Yield (MT/HA) 0.90 1.00 0.79 0.80 0.62 0.60 0.48 0.46 0.42 0.40 0.26 0.20 0.00 2012 2013 2014 2015 2016 2017 2018 2020 Year

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 mining subsectors had the highest labour productivity in the industry sector as shown in Figure 20.

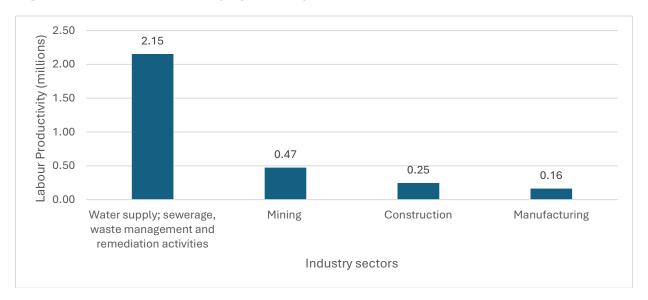


Figure 20: Labour productivity by industry sectors

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

Services Sector Labour Productivity

Professional, scientific and technical activities sub-sector had relatively higher labour productivity when compared with other sub-sectors within the services sector (Figure 21). Notable research and scientific institutions contributing to the output and employment in the county include Kenya Medical Research Institute (KEMRI) and Industrial Crops Research Institute among others.

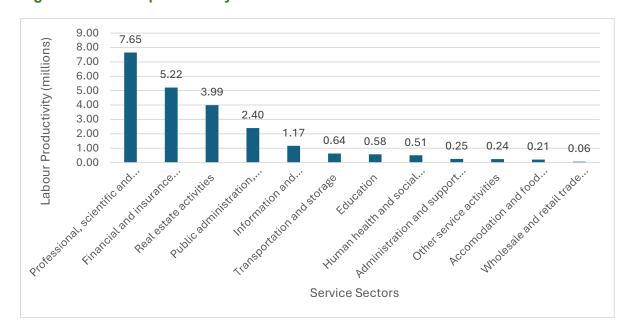


Figure 21: Labour productivity in services sectors

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

Key Messages

- (i) The services sector dominates county gross value added while the agriculture sector has the least share of GVA. The county has potential in crop production but constrained by climate change effects. The county is well known for sisal plantation. Dairy farming is gaining traction in the county and there are potential for honey production and poultry farming. while the industry sector share has declined overtime, the manufacturing sector has the highest share while the transportation and storage sub-sector dominate the services sector.
- (ii) The indicators of quality of labour performed above the national average. However, interventions are required to reduce stunting, teenage pregnancies, food and child poverty and to increase secondary school enrolment rates. Further, is increasing immunisation of children.
- (iii) Some of the essential infrastructure and capital indicators performed higher than the national averages. However, interventions are required to increase electricity and internet connectivity, improve rural roads and enhance financial inclusion.
- (iv) The agriculture sector is the highest employer mainly mixed farming and crop production. The construction and manufacturing sectors dominate the share of employment in the industry sector. The county has a diversified manufacturing sub-sector with employment concentrated in the manufacture of food products, textile and wearing apparel and manufacture of wood products. Majority of those working in the services sector are in wholesale and retail trade, the majority work in retail trade not in stores, stalls or markets.
- (v) Labour productivity in the county is lower than 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. There is potential for maize productivity.

Policy Recommendations

- (i) Build climate resilience in agriculture. This is by encouraging growing of drought resistant fast maturing crops, facilitating the uptake of crop insurance and optimizing utilization of information from the early warning systems to inform crop production to improve agricultural productivity. Also promote livestock production given the high multiplier effect when integrated into dairy and leather value chain. Develop the poultry value chain and facilitate and build capacity of farmers in honey production.
- (ii) Secure the quality of future labour by implementing nutrition sensitive social protection programmes to address stunting and child poverty. Improve quality of labour by reducing teenage pregnancies through creating awareness and supporting teenage mothers to continue with education. Of priority is also implementing 100 per cent secondary school transition rates.
- (iii) Invest in provision of essential infrastructure and capital to support private sector growth and to attract investments to the county by prioritizing electricity and internet connectivity improving rural roads and financial inclusion.
- (iv) With the ban on plastic bags, the use of bio-gradable bags s growing. The county therefore has potential to exploit the sisal industry to meet the demand.
- (v) The county also has various minerals including such critical minerals as manganese and titanium. With the green transition the critical becomes a potential for growing the economy of the county.

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