



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Tana River County

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Overview of the County

Tana River County is a member of two economic blocs namely the Jumuiya ya Kaunti za Pwani (JKP) economic bloc and the Frontier Counties Development Council (FCDC). The county is an arid county, experiencing between 85 and 100 per cent aridity levels. Tana River County covers an area of 35,376 km². It has three Sub-Counties namely: Tana Delta, Tana North, and Tana River.

Key Highlights

The productivity of Tana River County is characterized by the following:

- (i) The services sector dominates the gross value added. In agriculture crop production is susceptible to drought episodes. Livestock production is dominated by goat for meat and there is potential for apiculture. Manufacturing has increased over time and the services sector is dominated by non-market services.
- (ii) The quality of labour requires interventions to improve literacy rates, school enrolment and transition, stunting, and teenage pregnancies.
- (iii) The essential infrastructure interventions are needed to improve access to internet and electricity connectivity, rural roads, water and sanitation, and financial inclusion.
- (iv) With a significant proportion of out of school children engaged in economic activities, this is hindering early attainment of formal skills. Further, high inactivity rates for persons of prime age are of concern as it indicates lower labour utilization.
- (v) The agriculture sector employs most of the labour force in livestock production. In industry sector, construction dominates while mining is a potential source of employment. For manufacturing, food, beverage, and tobacco products have the highest share of employment. In the services sector, wholesale and retail trade dominates.
- (vi) Labour productivity is lower than the national average. Productivity is highest in the services sector and lowest in agriculture. Low productivity in agriculture is

explained by the effects of drought. For the industry, manufacturing has the highest productivity.

To enhance productivity:

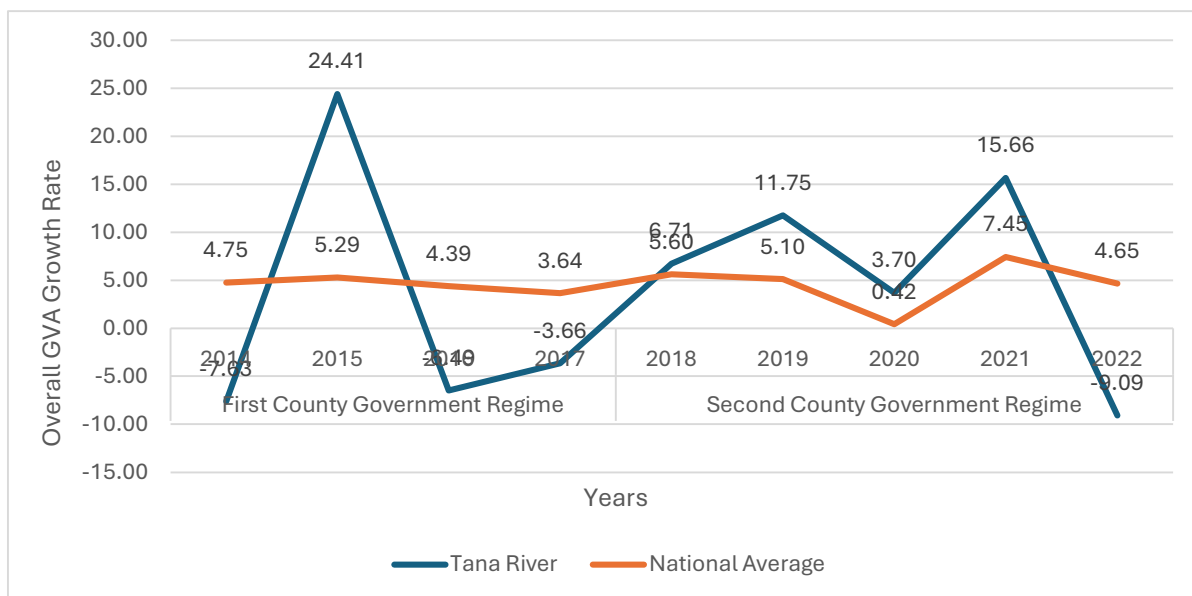
- (i) Build climate resilience in the livestock sub-sector through increased uptake of weather-based insurance schemes, use information on drought early warning systems, and establishment of county livestock enterprise fund to finance restocking.
- (ii) Create an enabling environment for private sector growth by improving internet and electricity connectivity, upgrading rural roads, access to improved water and sanitation, and deepening financial inclusion. Furthermore, it is important to support implementation of the county aggregated industrial parks.
- (iii) Boost agriculture productivity by increasing investments in irrigated-crop production and fully implement the Galana Kulalu irrigation project. Further, integrate livestock production into the leather value chain and encourage apiculture.
- (iv) Encourage participation in the Adult and Continuing Education programme to improve the quality of the current labour force. Also, encourage the transition to secondary school and implement nutritional projects that address stunting and child poverty to improve the quality of the future labour force.

Tana River County Economic Performance

Tana River County contributes on average 0.3 per cent of the National Gross Value added with an average GVA of Ksh 22,0869 million. The GVA per capita for Tana River County is Ksh 69,908.3057 with an average population growth of 2.8 per cent and overall poverty levels at 67.8 per cent.

Tana River County has shown a steady growth in GVA with an average growth rate of 3.93 per cent in the period 2013-2022, which is lower than the national average growth of 4.37 per cent as shown in Figure 1 below. The highest growth rate was experienced in 2015 while there was a contraction in 2022 (Figure 1).

Figure 1: Tana River County GVA growth rate

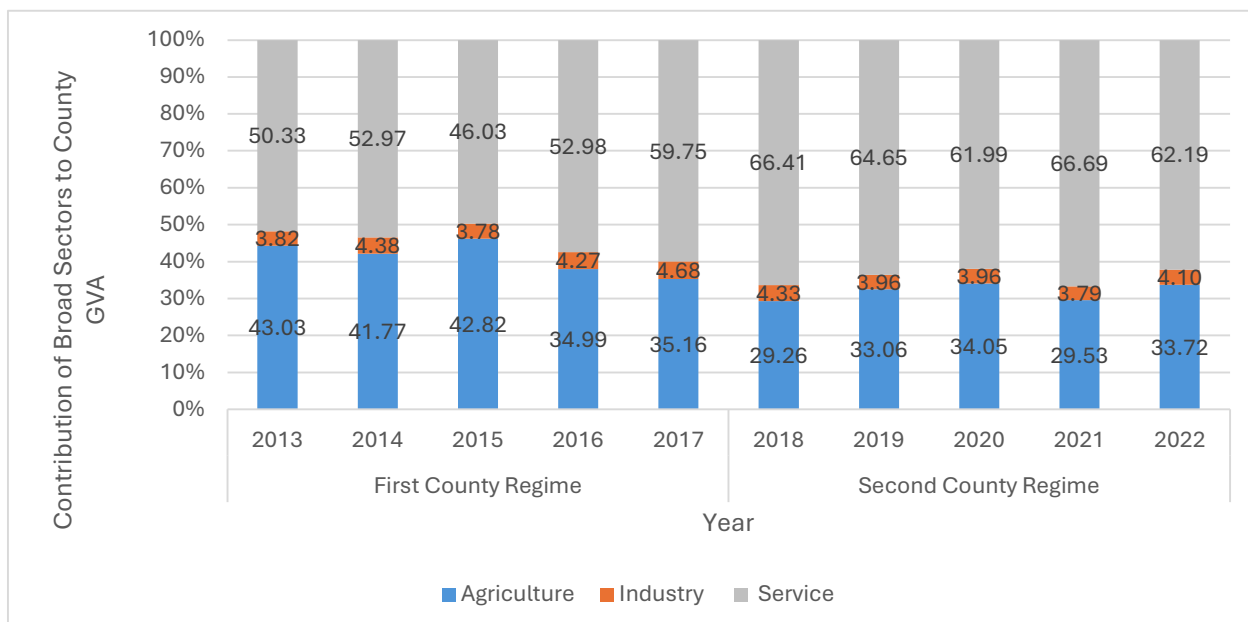


Data Source: KNBS 2023-Gross County Product

Sectoral Analysis of GVA

The services sector is dominant in Tana River County with an average contribution to GVA of 58.40 per cent. The agriculture sector is second, contributing an average of 35.74 per cent to the GVA while industry contributes about 4.11 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Tana River County GVA

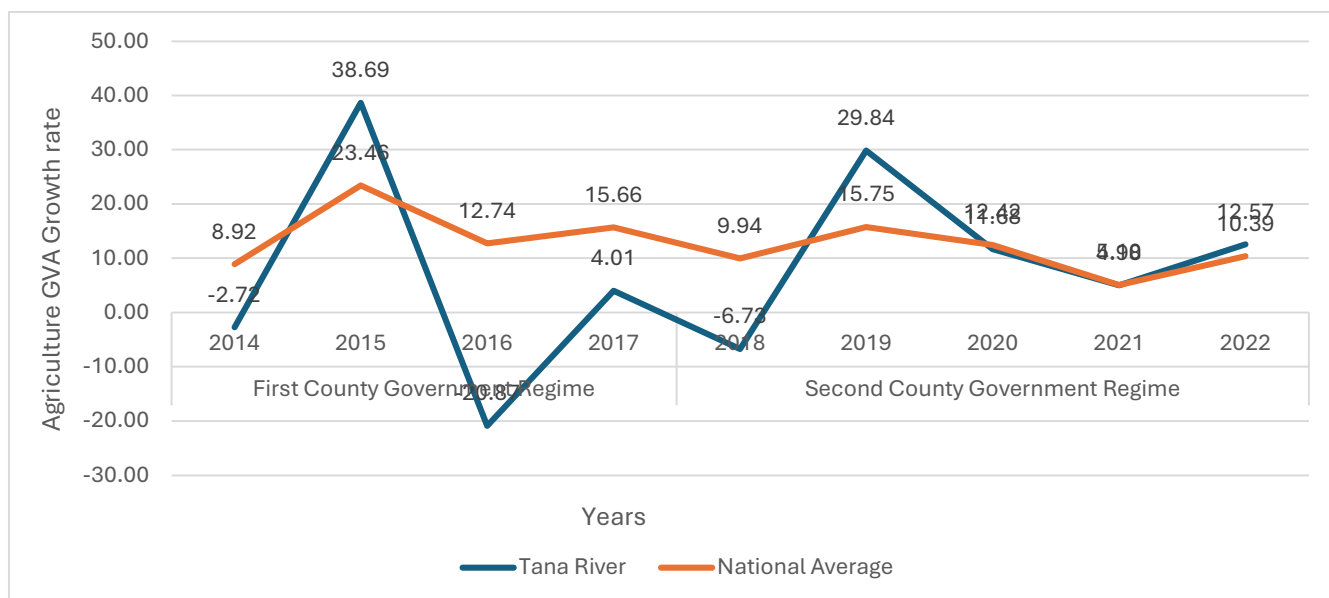


Data Source: KNBS 2023-Gross County Product

Agriculture Sector

The average agriculture GVA growth rate in 2013-2022 is 7.94 per cent, which is below the national average of 12.71 per cent as shown in Figure 3. The growth rates have been significantly low for three consecutive years, 2016-2018, due to drought episodes.

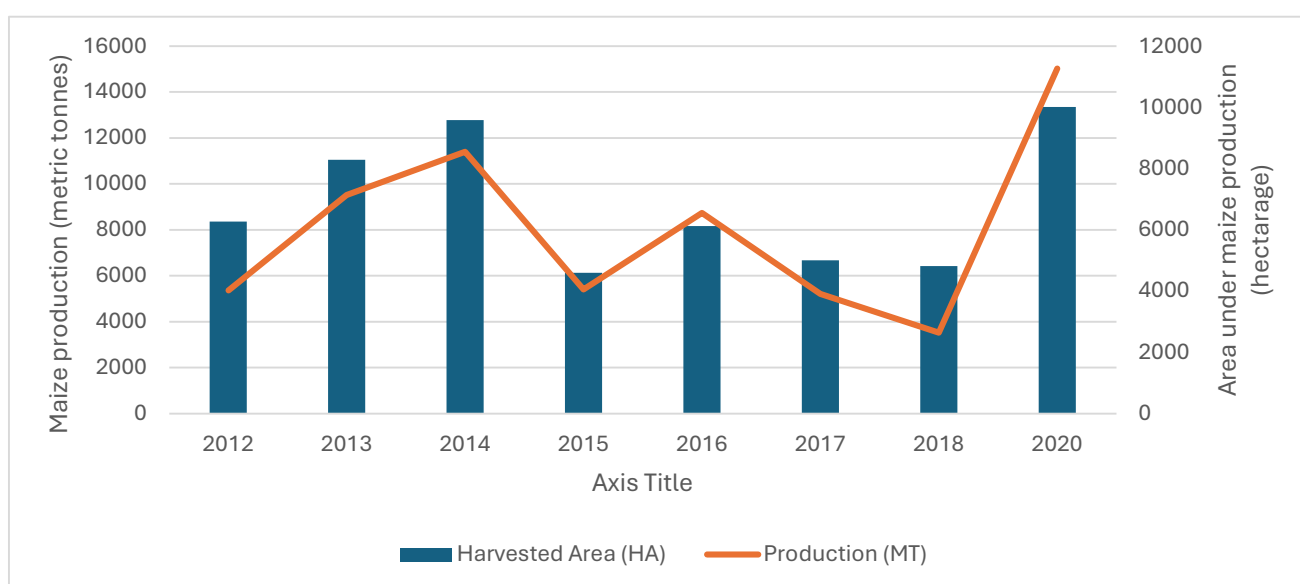
Figure 3: Tana River County agriculture GVA growth rate



Data Source: KNBS 2023-Gross County Product

The high aridity in Tana River County limits rainfed crop production, as reflected by the low area harvested for maize. Both maize production and area under maize production have been fluctuating with a consistent decline in 4 consecutive years, 2015-2018 (Figure 4).

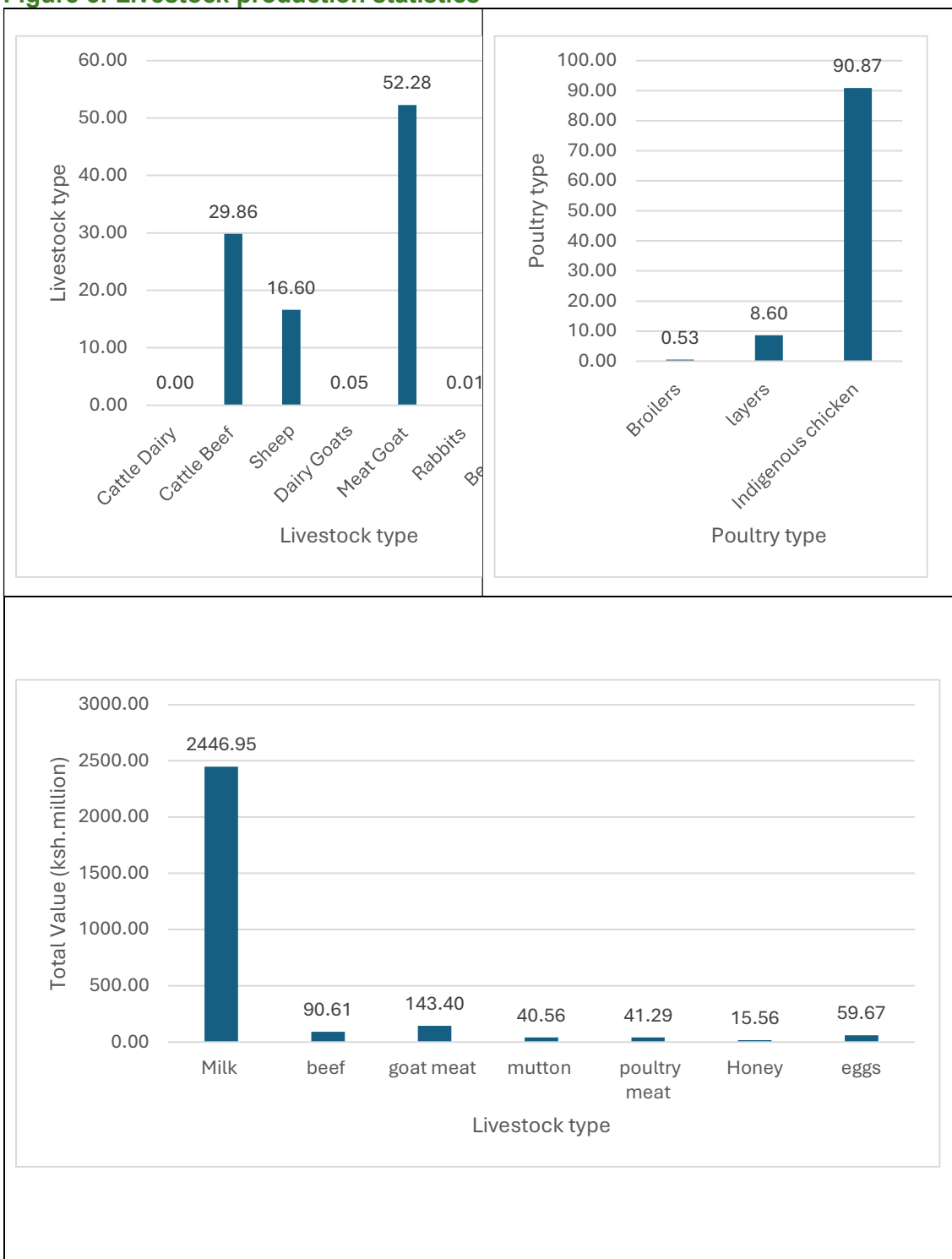
Figure 4: Maize production and area of maize harvested



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

Tana River County has a comparative advantage in livestock production, with substantially high number of beef cattle, sheep, and meat goats in the country. Meat goats are the most popular livestock kept. Milk, a product of cattle farming has the highest value in the county. Although Tana River County has significant livestock resources the value of marketed hides and skins is very low, as livestock production is yet to be fully integrated into the leather value chain. Additionally, climate change through frequent and severe droughts inhibits full realization of the potential in livestock production (Figure 5).

Figure 5: Livestock production statistics

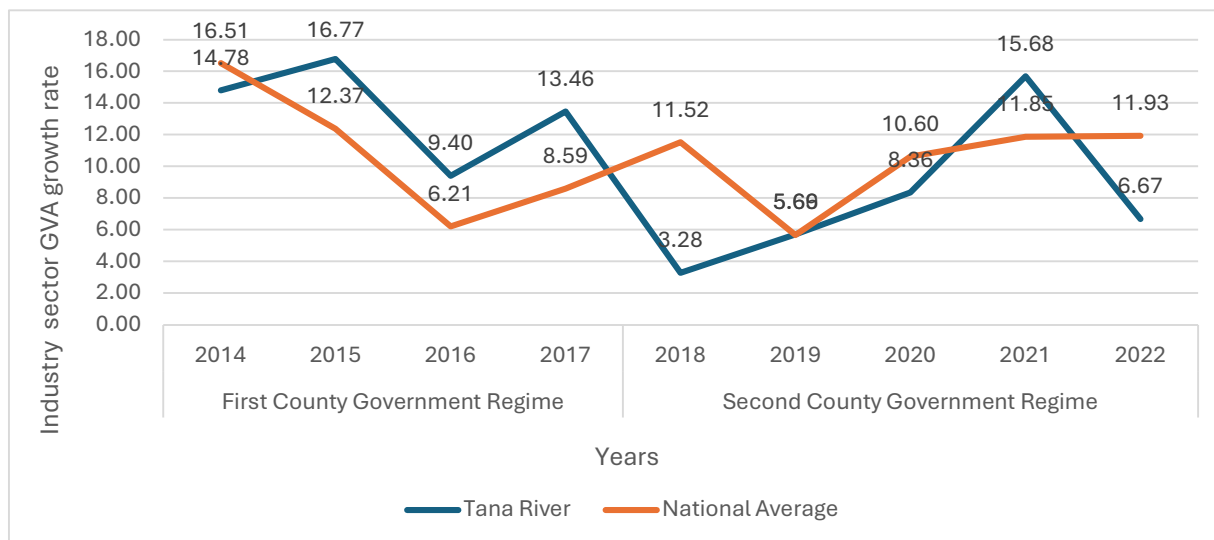


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector

The average growth rate for industry sector is 10.45 per cent, which is slightly below the national average of 10.58 per cent as shown in Figure 6.

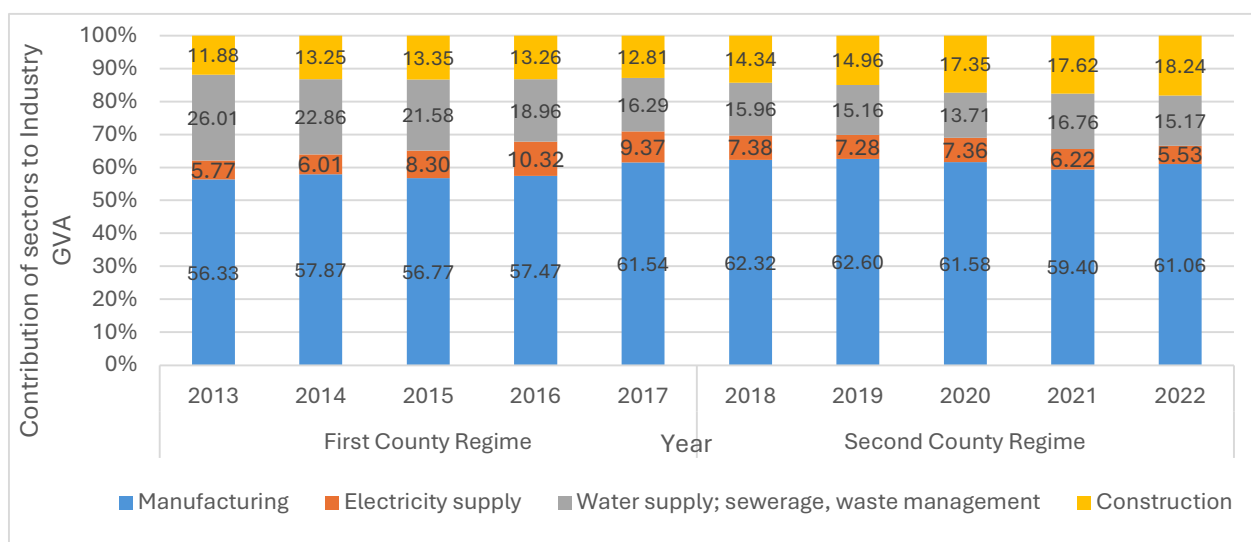
Figure 6: Tana River County industry GVA growth rate



Data Source: KNBS 2023-Gross County Product

Manufacturing dominates the industry sector as shown in Figure 7.

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

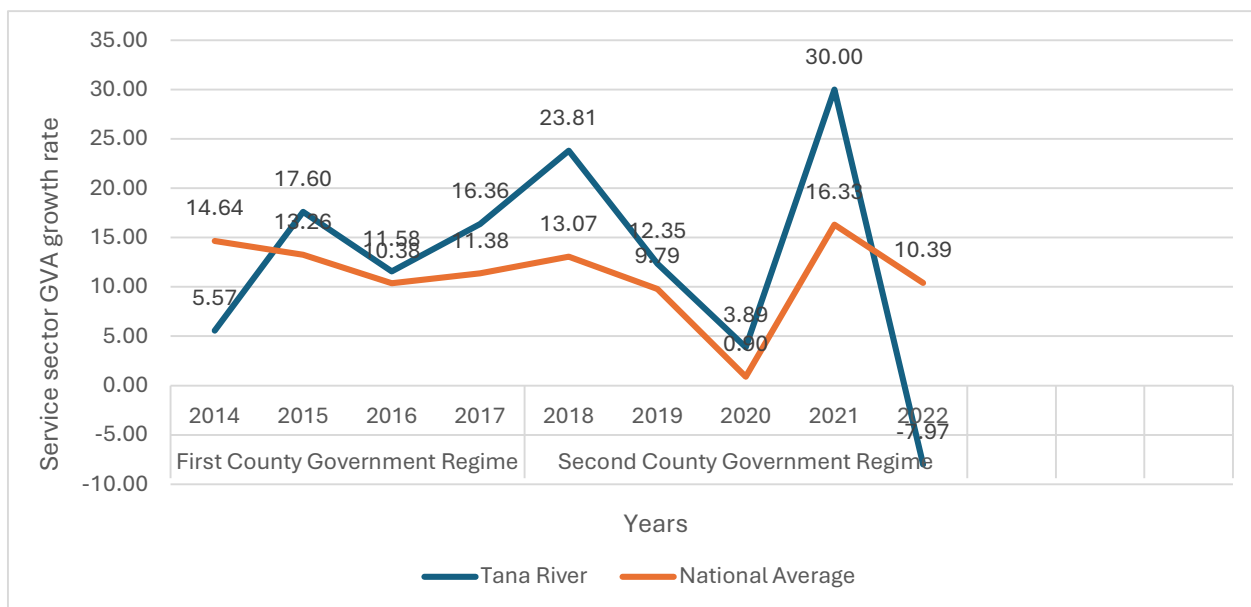


Data Source: KNBS 2023-Gross County Product

Services Sector

The average growth rate of service sector is 10.03 per cent, which is below the national average of 11.13 per cent as shown in Figure 8.

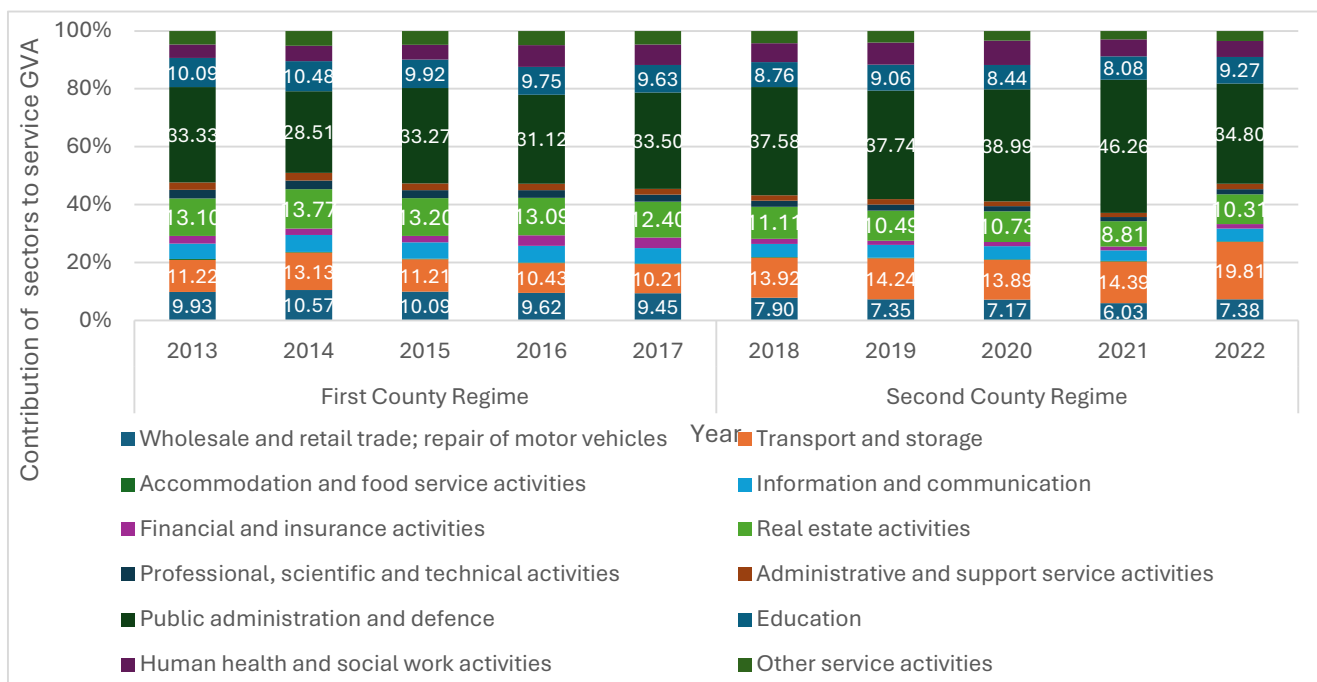
Figure 8: Tana River County services sector GVA growth rate



Data Source: KNBS 2023-Gross County Product

The public administration and defence sector, a non-market service, dominates the services sector with the highest contribution to service GVA at 35.51 per cent. The Transport and storage sector is second contributing 13.24 per cent to services sector GVA. The real estate activities contribute an average of 11.70 per cent as shown in Figure 9.

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



Data Source: KNBS 2023-Gross County Product

Quantity and Quality of Labour Force for Tana River County

Tana River County has a total of 153,294 working-age population, which is less than half of the county population at 48.52 per cent. Most of the working-age population is youthful (18-34 years) at 51.60 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	10,967	10,120	21,087	13.76
18 –24	18,863	20,158	39,021	25.46
25-34	18,848	21,231	40,079	26.15
35-64	27,165	25,942	53,107	34.64
Total	75,843	77,451	153,294	

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

Most of the population in Tana River sub-counties are persons in the working age categories at 49.38 per cent of the total population as shown in Table 2.

Table 2: Sub-County 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	
Tana Delta	110,640	7,786 (14.61)	12,997 (24.39)	12,878 (24.17)	19,621 (36.82)	53,282 (48.16)
Tana North	116,755	7,518 (13.04)	15,200 (26.37)	16,163 (28.04)	18,769 (32.56)	57,650 (49.38)
Tana River	88,546	5,783 (13.65)	10,824 (25.55)	11,038 (26.06)	14,717 (34.74)	42,362 (47.84)

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

Most of the socio-economic indicators that affect the quality of labour in Tana River County performed below the national average (Table 3). Interventions are required to improve education and health indicators that will improve the quality of labour.

Table 3: Human capital indicators

Human capital indicators	County	National average
Literacy rate	68.60	78.41
Pre-primary net enrolment rate (2019)	41.31	67.51
Primary school net enrolment rate (2020)	48.10	77.72
Secondary school net enrolment rate (2020)	18.90	54.18
Average years of schooling (2014)	6.20	7.78
Percentage of children 12 -23 months fully vaccinated (%)	70.20	74.97

Percentage of stunted children	21.10	19.75
Percentage of teenage pregnancy	17.60	15.79
Primary to secondary transition rates (2020)	82.40	86.13
Pupil-teacher ratio (primary school)	24.00	28.28
Food poverty head count (%)	49.50	33.63
Child poverty head count (%)	69.40	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

For Tana River County majority of the essential infrastructure and capital indicators that support production of county output are lower than the national averages as indicated in Table 4. There is a need for interventions to improve the quality and quantity of essential infrastructure to enable the county to exploit its latent resources.

Table 4: Essential infrastructure and capital indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census)	25.60	38.52
Distribution of population using the internet (2019 census)	8.90	18.69
Rural Access Index (2018)	11.35	63.72
Access to improved sanitation (2018)	60.00	59.04
Access to improved water (2018)	67.20	65.33
Financial inclusion level (2021)	71.30	81.01
The proportion of primary schools with internet	16.00	27.65
Proportion of secondary schools with functional internet	22.90	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	33.71	51.71
Percentage of households using bank usage (overall)	8.60	38.18
Percentage of households using mobile money	70.90	78.58

Data Sources: KRB 2018, KPHC 2019, FinAccess 2021, KIHBS 2015/16, Basic Education Statistical Booklet, 2020

County Employment Statistics

Employment to population ratio is at 57.29 per cent. Most of those working are youthful (18-34 years) as shown in Table 5. The percentage of the employed by gender is 37.77 per cent male and 36.94 per cent female. The unemployment rate is high at 16.22 per cent with a slightly higher rate for the youth (18-34 years) at 9.49 per cent.

There is a high percentage (25.21%) of persons 5–17 years old working. This can be explained by cultural practices where children and teenagers in pastoral communities play an important role in livestock production grazing the livestock. Although this is critical in helping them attain indigenous knowledge that is critical for the sustenance of pastoralism it is at the expense of early attainment of formal skills that are needed for alternative livelihoods and industrial transformation of counties. Climate change through the frequent droughts that force communities to migrate in search of resources, and

incidences of insecurity which disrupt learning activities, are also possible causes of the high number of out-of-school children who are engaged in economic activities.

The inactivity rate for the youth category is 17.16 per cent while for the non-youth it is 8.66 per cent. The higher inactivity rate for persons of prime age is a concern as it indicates lower labour utilization.

Table 5: Tana River County employment statistics

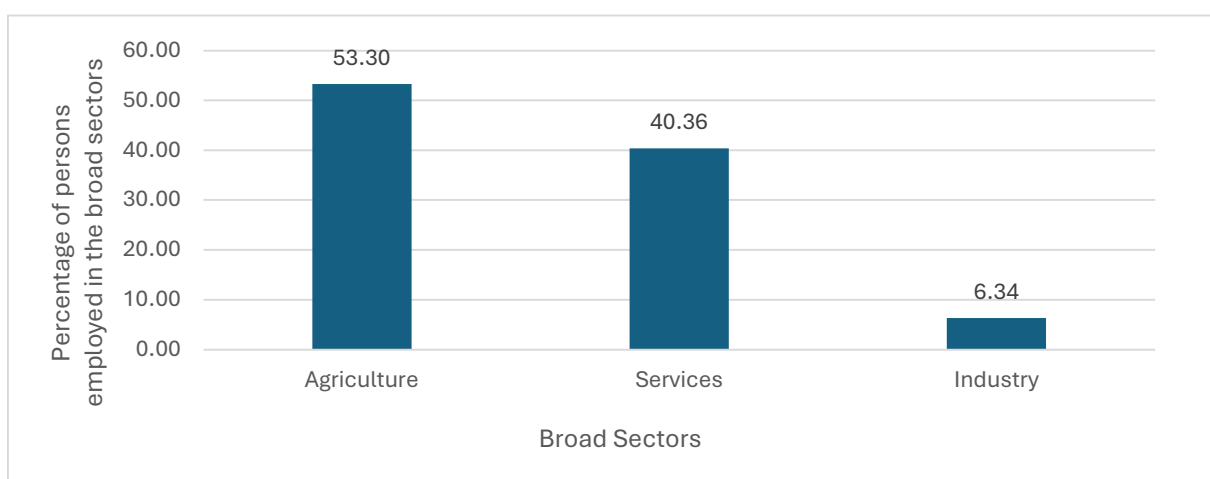
Employment statistics	Youth	Non youth
Employment to population ratio (%)	29.50	24.15
Unemployment rate	16.22	9.49
Percentage of persons 5–17 years old working	25.21	-
Inactivity rate	17.16	8.66

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

Sectoral Employment

The agriculture sector is the main employer in Tana River County at 53.30 per cent followed by the services sector at 40.36 per cent. The industry sector is the least at 6.34 percent as shown in Figure 10.

Figure 10: Percentage of persons employed in the broad sectors

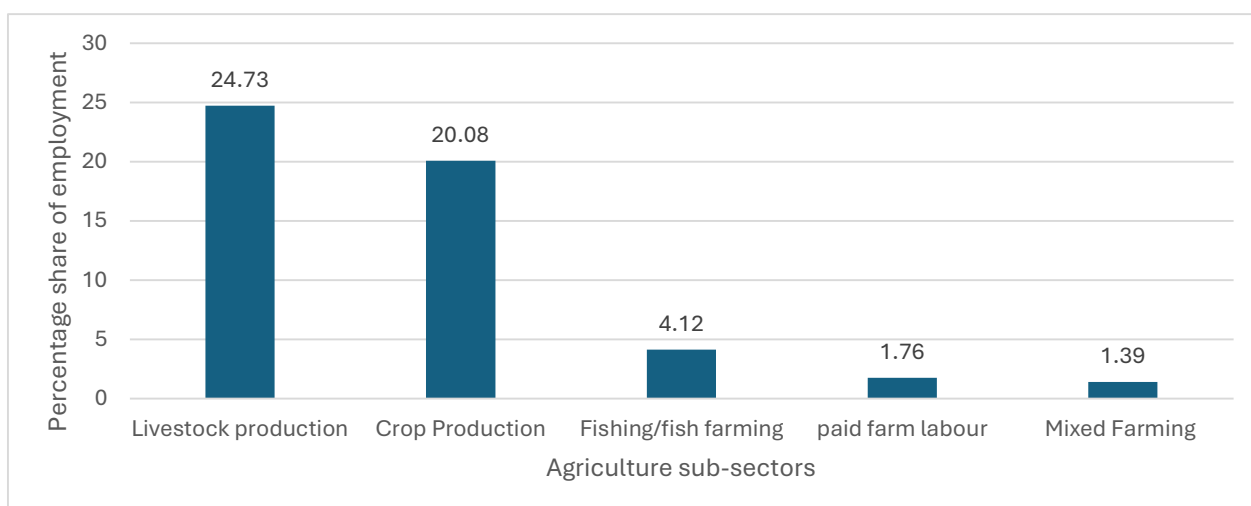


Data Source: KNBS 2021- Kenya Continuous Household Survey

Agriculture Sector Employment

Livestock production dominates employment in the agriculture sector. This reflecting the comparative advantage the county has in livestock production (Figure 11).

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

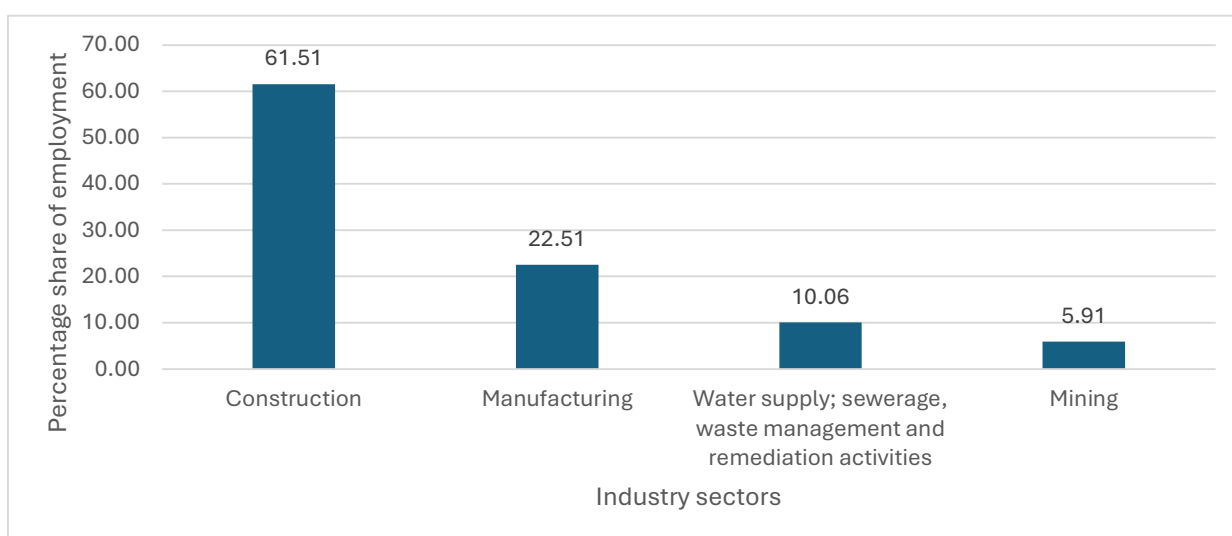


Data Source: KNBS 2021- Kenya Continuous Household Survey

Industry Sector Employment

The majority of those working in the industry sector are in the construction sub-sector (Figure 12). This mainly entailed the construction of buildings while those working in the mining sector are mainly involved in the quarrying of stones.

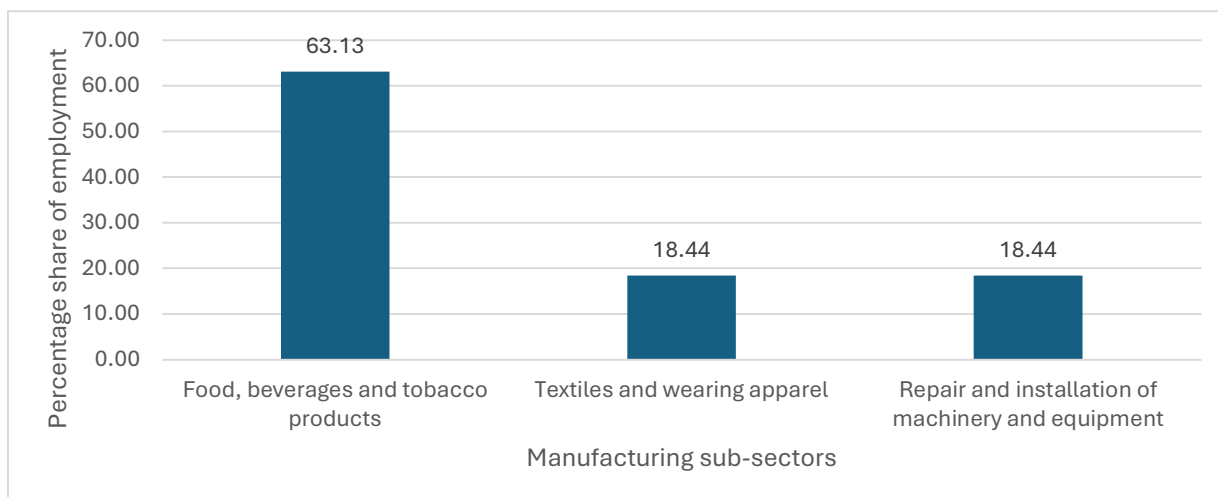
Figure 12: Percentage share of employment in the industry sectors



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 the manufacture of food products and textile industries as shown in Figure 13.

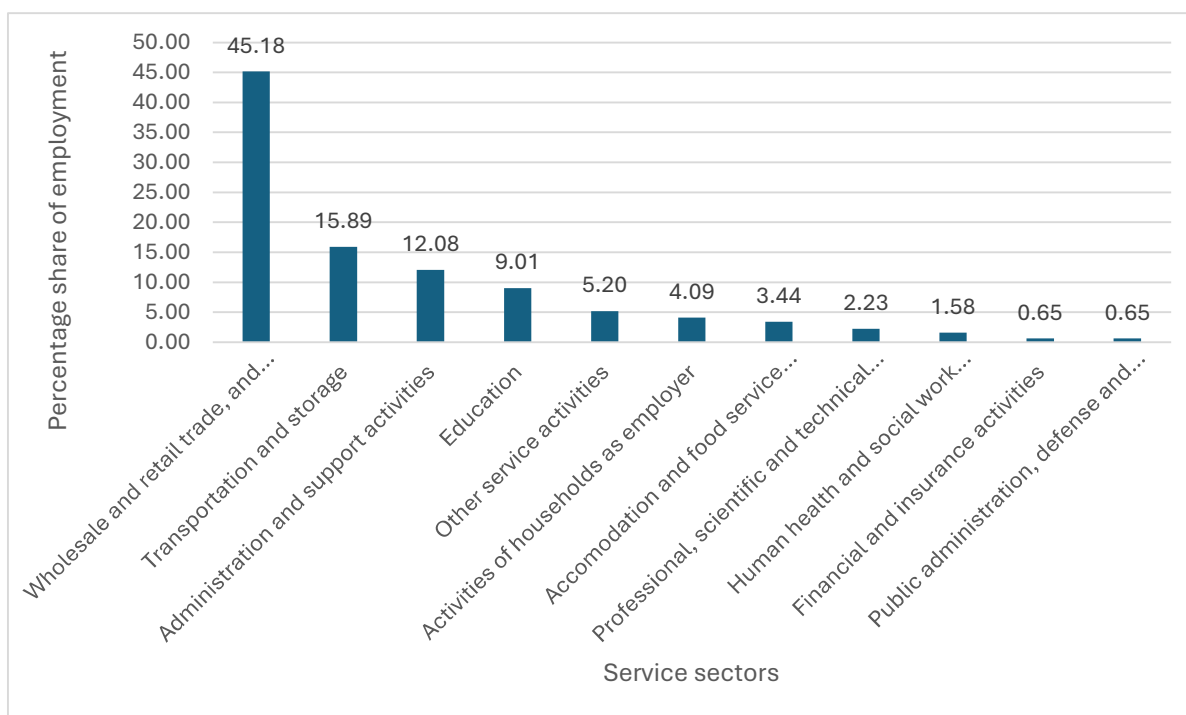
Figure 13 : Percentage share of employment in manufacturing sub-sectors



Data Source: KNBS 2021- Kenya Continuous Household Survey

Majority of those working in the services sector are in wholesale and retail trade as observed in Figure 14.

Figure 14 : Percentage share of employment in the service sector

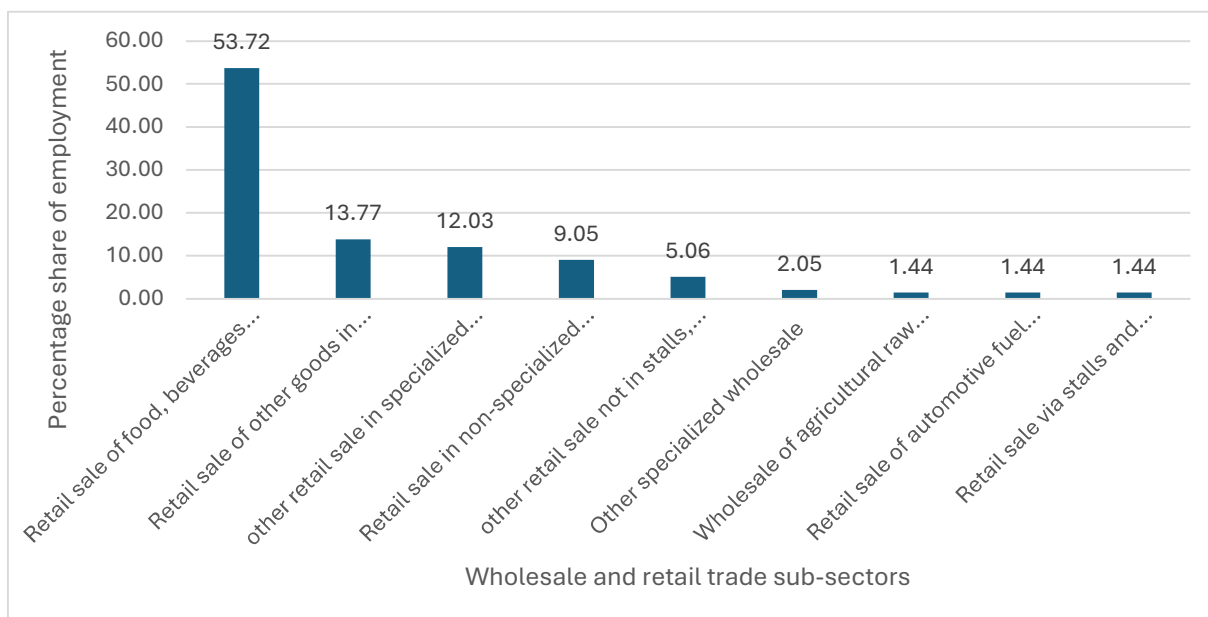


Data Source: KNBS 2021- Kenya Continuous Household Survey

Services Sector Employment

In the wholesale and retail trade, the majority work in the retail of food, beverages, and tobacco products as observed in Figure 15.

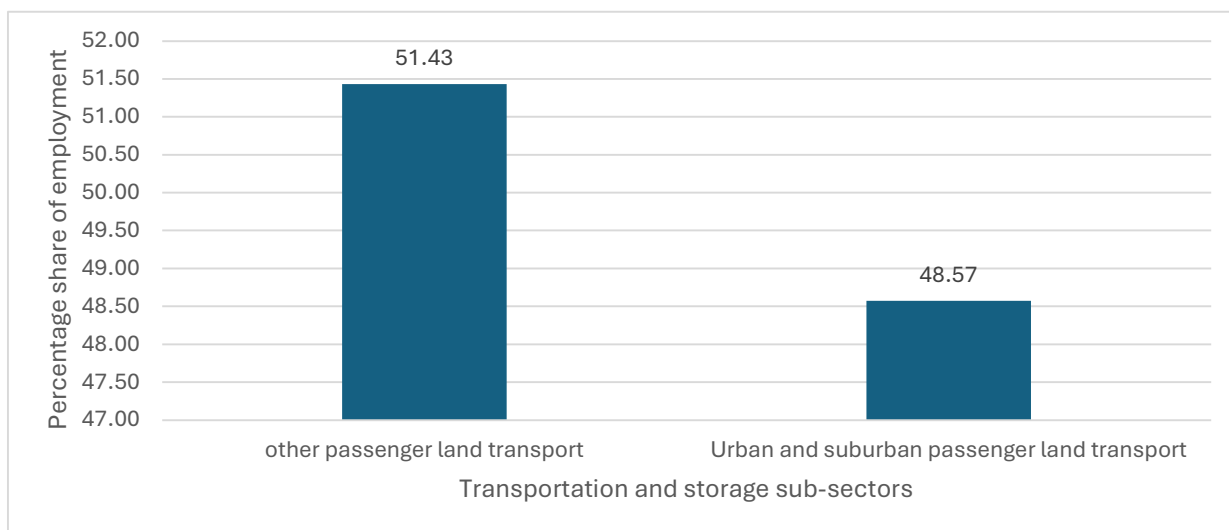
Figure 15: Percentage of persons employed in the wholesale and retail trade; repair of motor vehicle sub-sectors.



Data Source: KNBS 2021- Kenya Continuous Household Survey

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

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

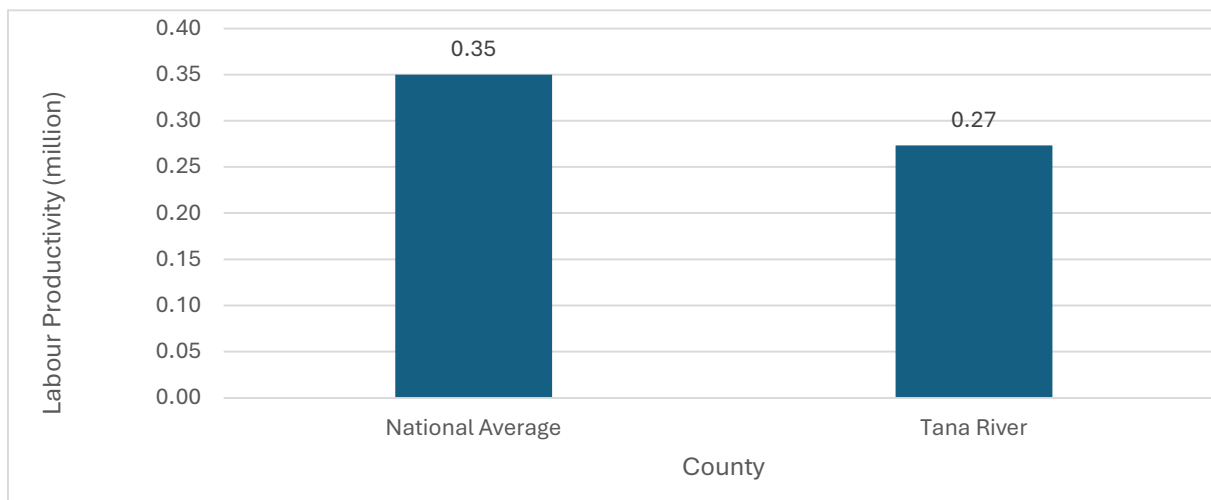


Data Source: KNBS 2021- Kenya Continuous Household Survey

Labour Productivity

Labour productivity¹ for Tana River County is below the national average as shown in Figure 17.

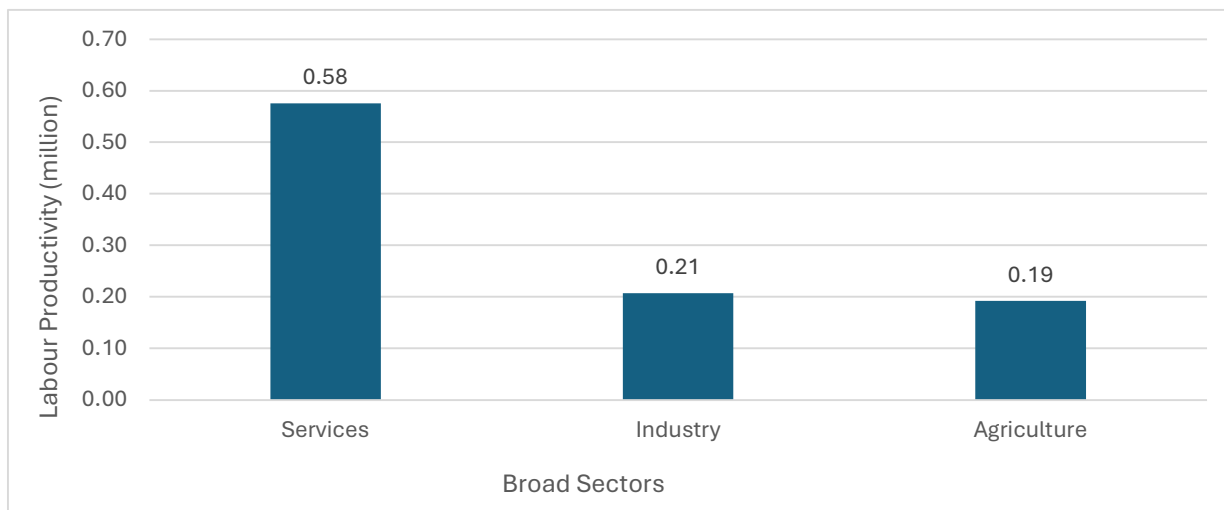
Figure 17: Labour productivity ratios (million)



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 at 0.58 per cent, followed by the industry sector at 0.21 per cent, and thirdly the agriculture sector at 0.19 per cent as shown in Figure 18 below.

Figure 18: Labour productivity by sectors



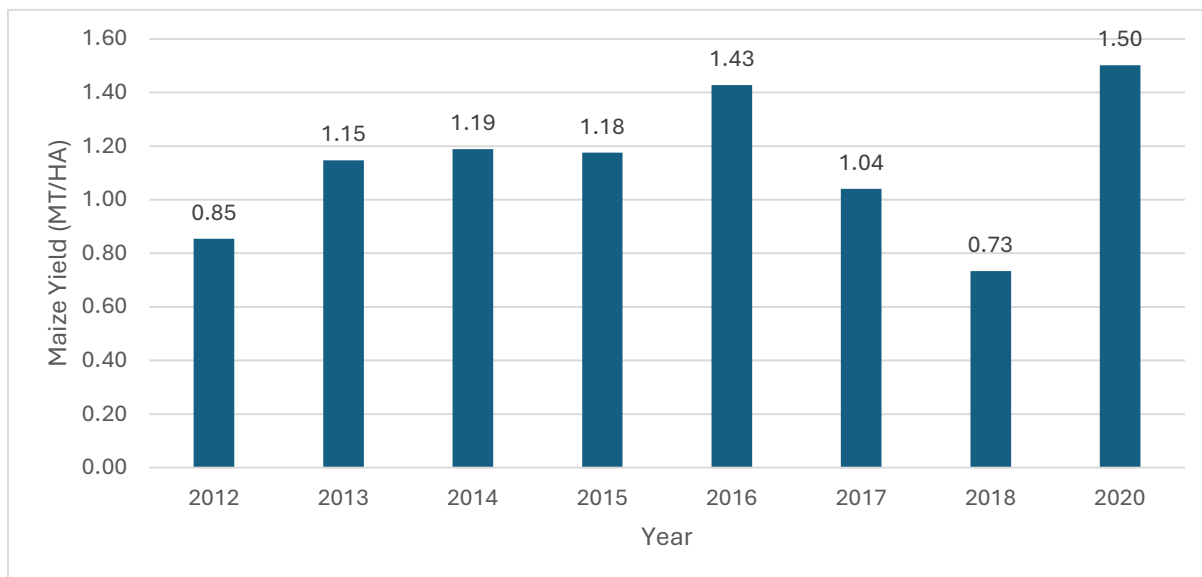
Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

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

Agriculture Productivity

In agriculture maize yield is relatively higher in Tana River County when compared with other arid counties at an average of 1.13 MT/HA (Figure 19). This can be attributed to the presence of irrigation schemes in the county that support crop production in the face of high aridity.

Figure 19: Maize yield (MT/HA)

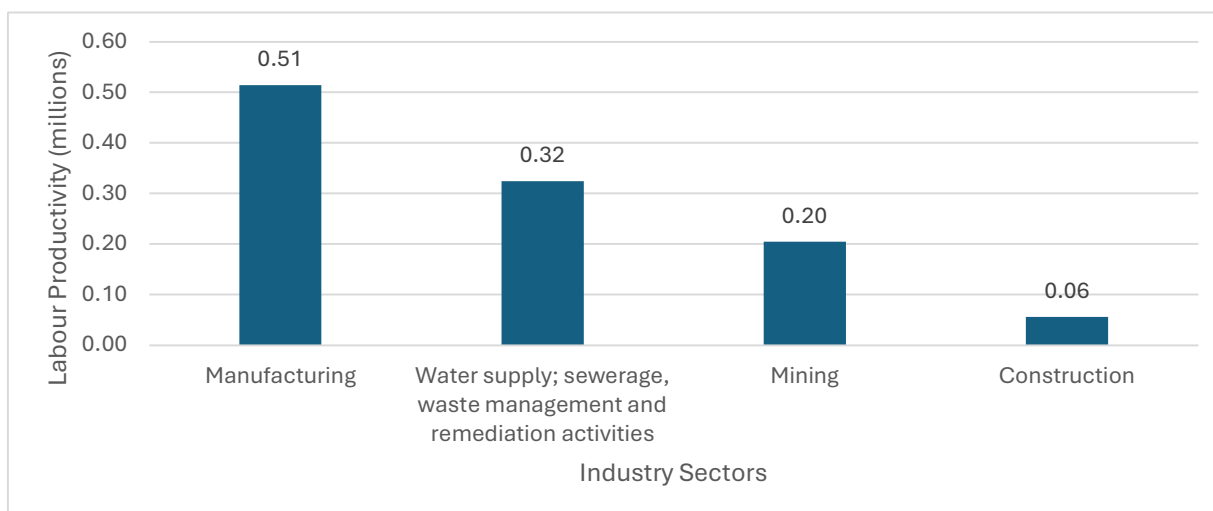


Data source: National Information Platform for Food and Nutrition (NIPFN)

Industry Sector Labour Productivity

Manufacturing and water supply including sewerage, waste management and remediation activities sub-sectors had the highest labour productivity in the industry sector as shown in Figure 20.

Figure 20: Labour productivity by industry sectors

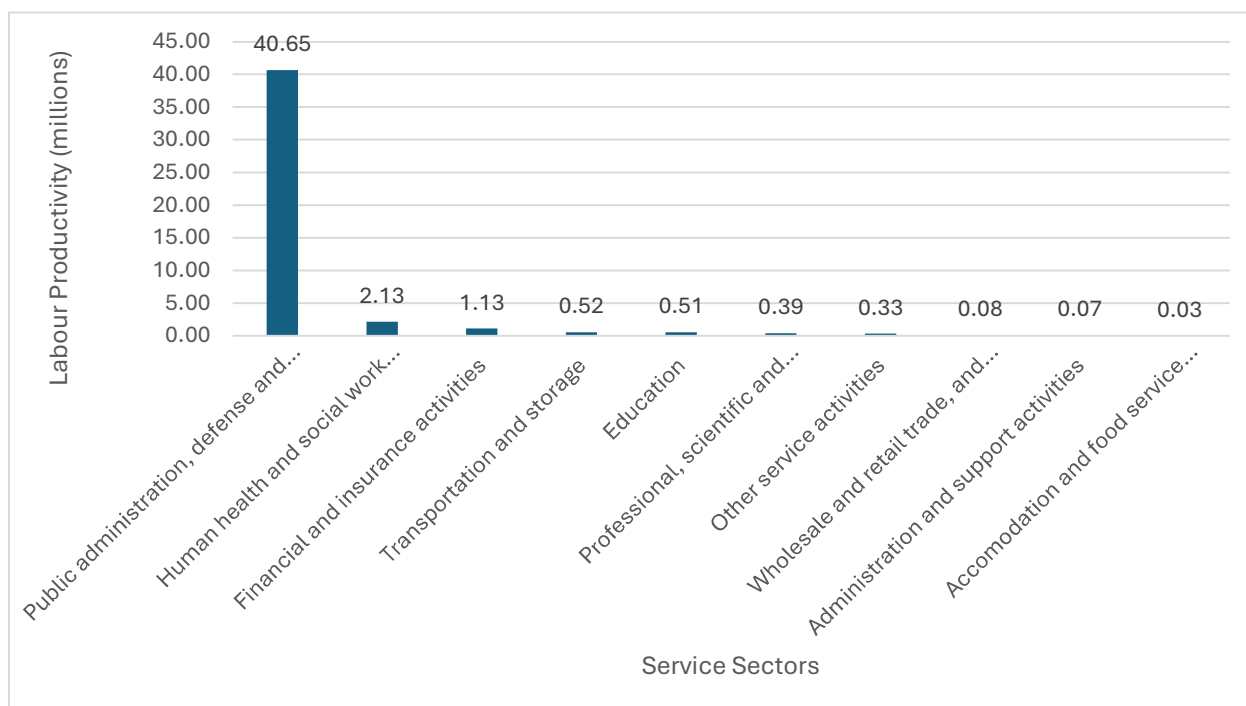


Data Source: Author's computation using KNBS 2023-Gross County Product and KNBS 2021- Kenya Continuous Household Survey

Services Sector Labour Productivity

The public administration and defense sub-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 has the highest employment in the services sector has one of the lowest levels of labour productivity 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 dominates the county GVA. The share of agriculture has declined while industry remains very small at less than 5 per cent. In agriculture, crop production is susceptible to drought episodes. Livestock production is dominated by goat for meat and there is potential for apiculture. Industry is dominated by manufacturing which has been increasing over time. Further, the services sector is dominated by non-market services.
- (ii) The indicators of quality of labour are lower than the national average. Interventions are required to improve literacy rates, school enrolment and transition, stunting, and teenage pregnancy, which affect the quality of labour.
- (iii) Majority of the essential infrastructure and capital indicators, that support the production of county output, are lower than the national averages. There is a need to intensify interventions to improve on internet and electricity connectivity, rural roads, water and sanitation, and financial inclusion.
- (iv) There is a high percentage (25.21%) of persons 5–17 years old working. The high out-of-school children who are engaged in economic activities hinder the

early attainment of formal skills that are needed for skills development. Further, the high inactivity rates for persons of prime age is of concern as it indicates lower labour utilization.

- (v) The agriculture sector employs most of the labour force especially in livestock production. In industry sector, construction dominates while mining is a potential source of employment. For manufacturing, food, beverage, and tobacco products have the highest share of employment. Further in the services sector, wholesale and retail dominate.
- (vi) Labour productivity is lower than the national average. Productivity is highest in the services sector and lowest in agriculture. The agriculture sector has the lowest productivity which can be explained by the effects of drought on agricultural output in the county. Despite this, the county has potential for irrigated crop production as it hosts the Tana River Irrigation Scheme, the oldest National Irrigation Authority scheme. One of the key projects exploiting this potential is the Galana Kulalu Project. For the industry sector, manufacturing has the highest productivity.

Policy Recommendations

- (i) Build climate resilience in the livestock sub-sector through increased uptake of weather-based insurance schemes, and optimal use of information on drought early warning systems to encourage commercial offtake of livestock to mitigate losses. The county can also consider establishing a county livestock enterprise fund that will finance pastoralists to restock after drought episodes to accelerate recovery.
- (ii) Create an enabling environment for private sector growth by improving internet and electricity connectivity, upgrading rural roads, access to improved water and sanitation, and deepening financial inclusion. Furthermore, it is important to support implementation of the county aggregated industrial parks.
- (iii) Boost agriculture productivity by increasing investments in irrigated-crop production and fully implementing the Galana Kulalu irrigation project. Further, integrate livestock production into the leather value chain. This can be achieved by commercializing supply of hides and skins by creating awareness among pastoralists on the value of hides and skins, increasing extension services to improve the quality of hides and skins, facilitating aggregation and pooled sales of hides and skins. Encourage apiculture.
- (iv) Encourage participation in the Adult and Continuing Education programme to improve the quality of the current labour force. Improving the effectiveness of adult learning centres by investing in mobile adult learning centres that target nomadic pastoralists who move during droughts. Increasing funding to the Adult and Continuing Education programme to increase the number of facilities and trainers. Further, encourage the transition to secondary school and implement nutritional projects that address stunting and child poverty.

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