



Policy Brief

Thinking Policy Together

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Assessing Labour Productivity for Mandera County

By Cecilia Naeku and Esther Irungu

Introduction

Mandera County is a member of the Frontier Counties Development Council (FCDC). It is classified as arid, experiencing 85-100 per cent aridity. Mandera County covers an area of 25,798 km². It has seven sub-counties namely: Mandera West, Banisa, Kotulo, Lafey, Mandera Central, Mandera East, and Mandera North.

Key highlights

- (i) Due to severe drought conditions, Mandera County has not fully realized its livestock production potential. Low-marketed hides and skins indicate that livestock production is yet to be fully integrated into the leather value chain and the market. Non-market service dominates the services sector.
- (ii) The quality of labour calls for interventions to improve literacy rates and health indicators including stunting and teenage pregnancy for an improved quality of labour. The majority of the essential infrastructure and capital indicators that support the production of county output are lower than the national averages.
- (iii) Employment rate in Mandera is low but there is significant child labour (15-17 years) mainly due to cultural practices, insecurity, and droughts. The inactivity rate for the non-youth is high.
- (iv) The agriculture sector is the highest employer in Mandera County despite the low output. In manufacturing, the majority are employed in low-technology sub-sectors.

- (v) Labour productivity for Mandera County is slightly above the national average labour productivity. Labour productivity in the agriculture sector is the lowest, which can be explained by the effects of drought on agricultural output in the county.

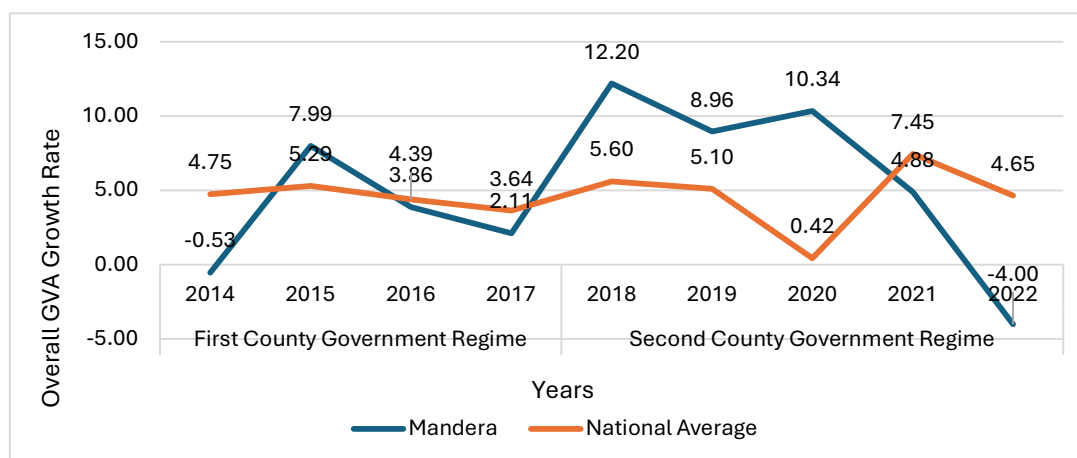
To enhance productivity, there is a need to:

- (i) Build climate resilience in the livestock sub-sector in arid counties through increased uptake of weather-based insurance schemes for livestock production. Optimally utilize the early warning information to salvage livestock on time.
- (ii) Integration of livestock production into the leather value chain. This goes 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) Encourage the development of market-oriented services by leveraging tourism resources to reduce the dominance of non-market services. Incentivize players in the hotel and accommodation to invest in tourist facilities in the arid counties and leverage cultural tourism and desert safaris that are unique to the region.
- (iv) Create an enabling environment to attract investment in industries that would provide employment opportunities. Also, increase funding to businesses established by vulnerable groups such as women and youth to ensure inclusive support of persons in the informal sector.
- (v) To improve the quality of labour, encourage participation in the adult and continuing education programme to improve through increased awareness campaigns on the benefits of adult learning targeting out-of-school youth and adults in the county.

Mandera County Economic Performance

Mandera County contributes on average 0.5 per cent of the National Gross Value Added with an average GVA size of Ksh 39,3906 million. The GVA per capita for Mandera County is Ksh 45,411 with an average population growth of 3.96 per cent and overall poverty levels at 71.9 per cent. Mandera County has an erratic growth rate with significant peaks and sharp declines. The county's average growth rate from 2013-2022 was 5.09 per cent. which is higher than the national average growth of 4.37 per cent as shown in Figure 1. The highest growth rate was experienced in 2018 at 12.2 per cent while a significant contraction was experienced in 2022 at 4.0 per cent.

Figure 1: Mandera County GVA growth rate

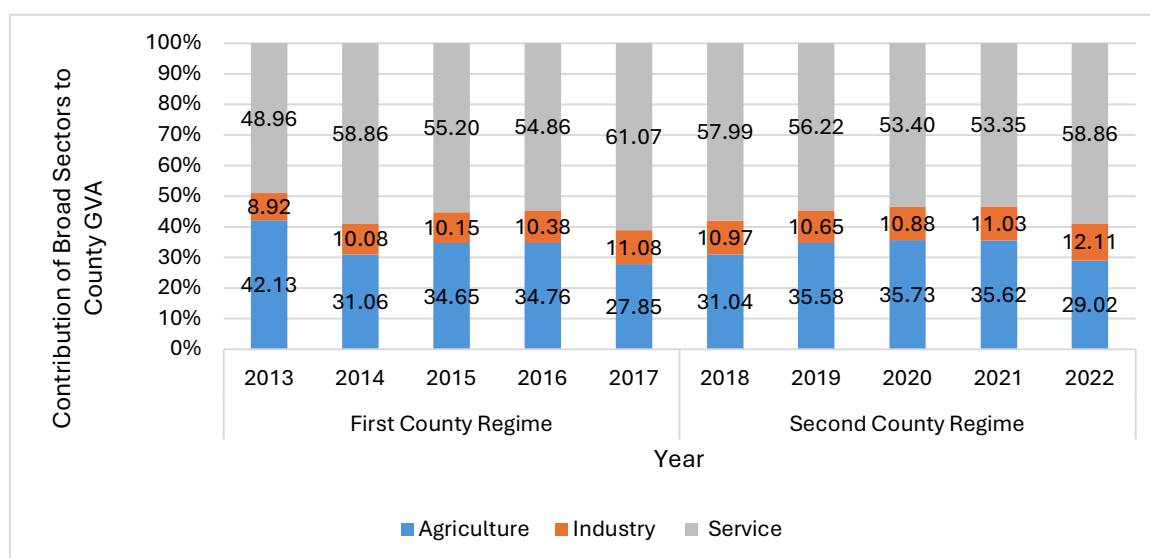


Data source: GCP (2023)

Sectoral analysis of GVA

The service sector is dominant in Mandera County with an average contribution to GVA of 55.88 per cent. The agriculture sector is second, contributing an average of 33.74 per cent to the GVA while the industry sector contributes about 10.63 per cent as shown in Figure 2.

Figure 2: Contribution of broad sectors to Mandera County GVA

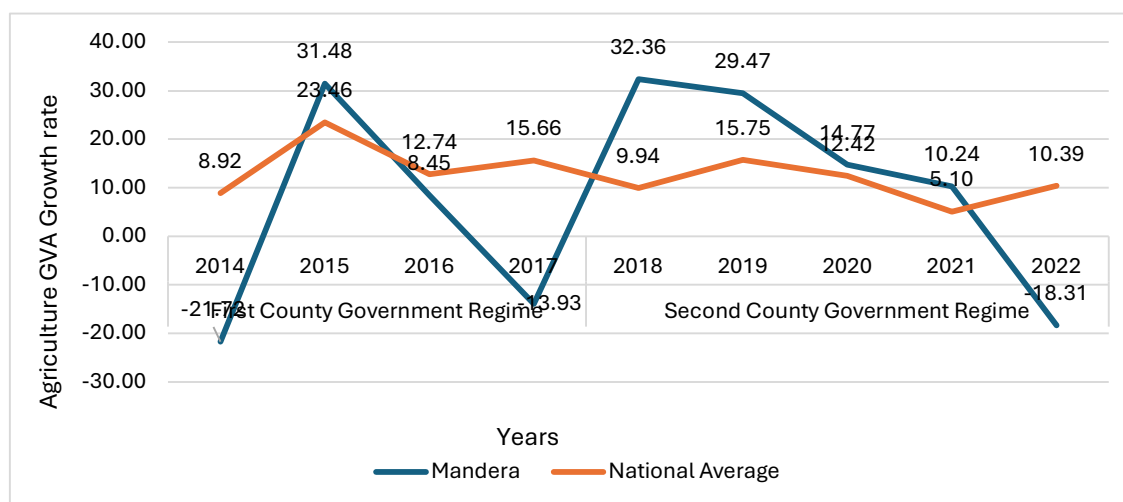


Data source: GCP 2023

Agriculture Sector

The average Agriculture GVA growth rate (2013-2022) for Mandera County is 8.09 per cent, which is below the national average of 12.71 per cent. The agriculture sector's growth rate has a very erratic trend as it is highly vulnerable to drought shocks. The highest decline in growth was in 2014 at -21.72 per cent, attributable to drought that affected about 1.6 million people. The 2016/17 drought also contributed to the decline in growth in 2017 while the 2020-2023 multi-year drought contributed to the -18.31 per cent decline in agriculture GVA experienced in 2023. The county has also experienced high growth rebounds as they recovered from drought episodes with the highest growth being in 2018 at 32.36 per cent as shown in Figure 3.

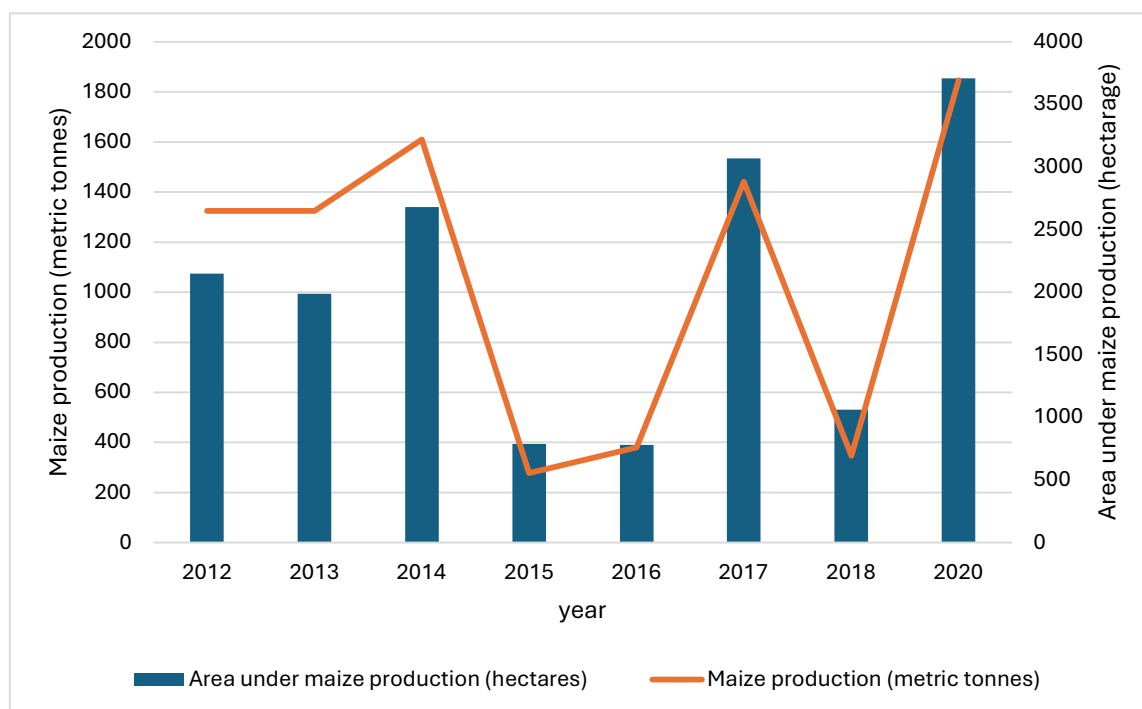
Figure 3: Mandera County agriculture GVA growth rate



Data source: GCP 2023

The high aridity levels in Mandera County limits rainfed crop production, this is reflected in the low area harvested for maize. Both maize production and the area under maize production have been decreasing over time (Figure 4).

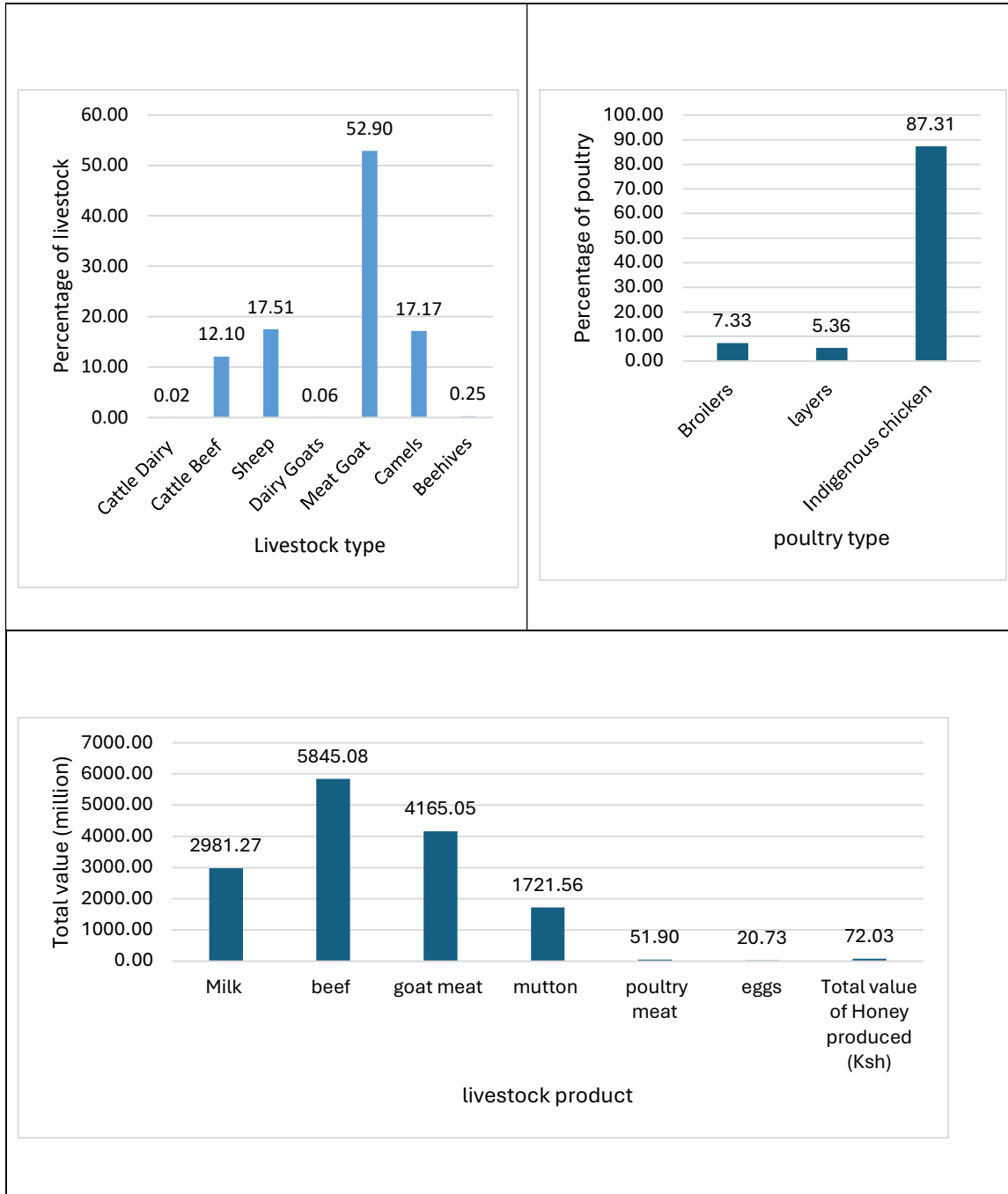
Figure 4: Maize production and area of maize harvested



Data source: NIPFN

Mandera County has comparative advantages in livestock production, the county has one of the highest numbers of beef cattle in the country, the second highest number of meat goats in the country, and a significantly high number of sheep. Meat goats are the most popular livestock kept, although the number of poultry farming is comparatively low in the county, indigenous chicken is more popular. Milk and beef products of cattle farming have the highest economic value in the county. Although Mandera County has significant livestock resources, there is no marketed value of hides and skins, as livestock production is yet to be fully integrated into the leather value chain. Additionally, climate change through frequent and severe droughts is also inhibiting the full realization of the potential in livestock production (Figure 5).

Figure 5: Livestock production statistics

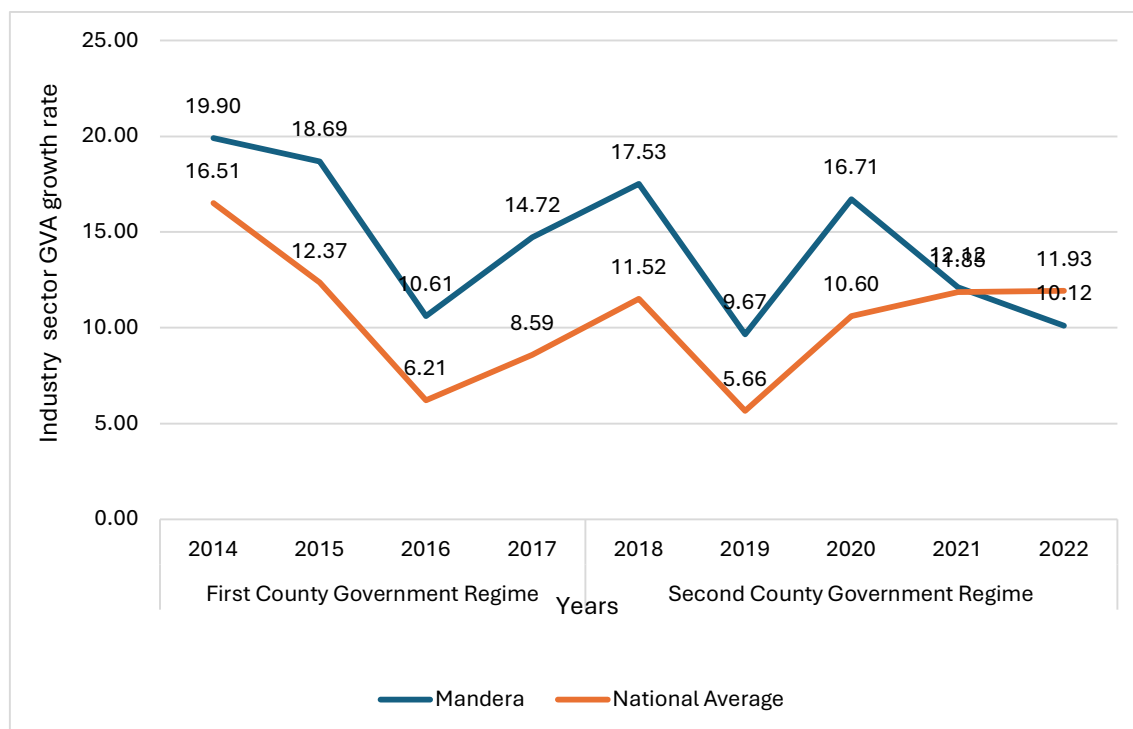


Data source: NIPFN

Industry Sector

The average industry sector growth rate for Mandera County is 14.45 per cent, which is above the national average of 10.58 per cent as shown in Figure 6. The industry GVA has shown a positive and steady trend for all the years under review.

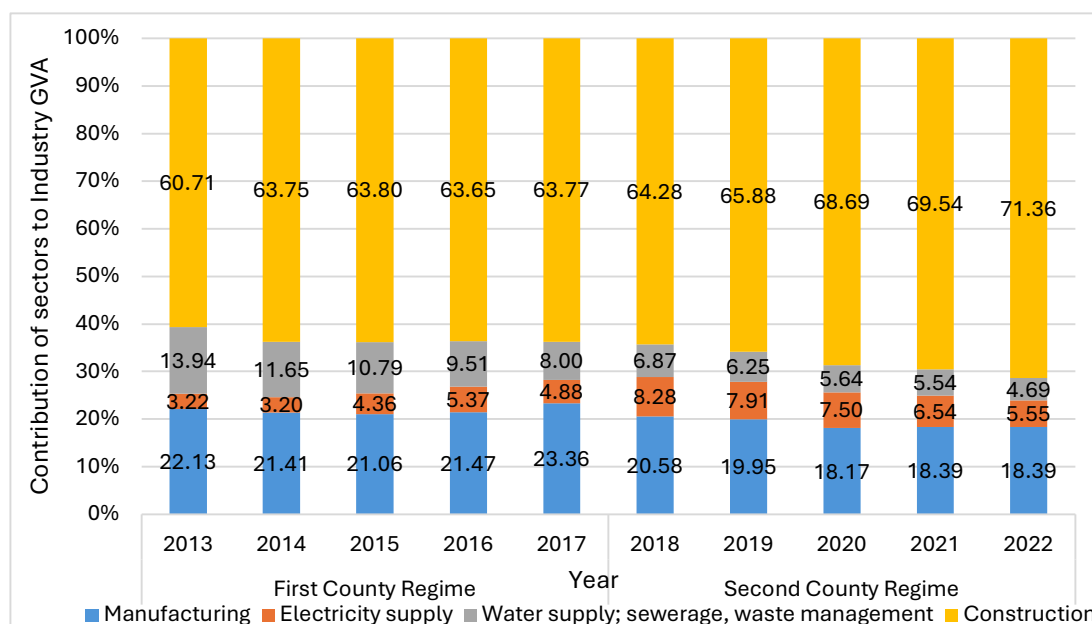
Figure 6: Mandera County industry sector GVA growth rate



Data source: GCP 2023

Construction dominates the industry sector as shown in Figure 7. This can be attributed to increased urbanization and investments in essential infrastructure, which have been historically lower in Mandera. Notably, the LAPSSET transboundary corridor passes through Mandera County among other arid counties. Devolution has also played a big role in infrastructural developments in counties through the allocation of resources to county roads and the establishment of county headquarters.

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

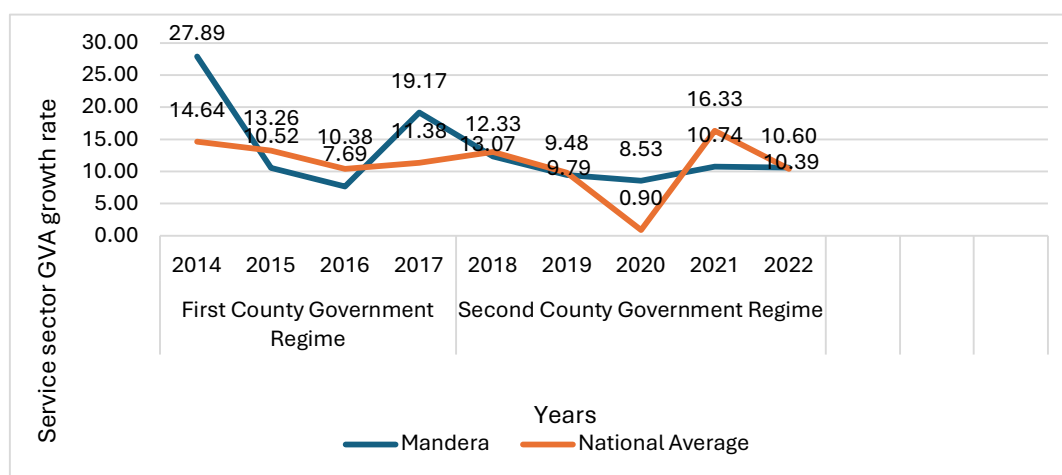


Data source: GCP 2023

Services Sector

The average service sector growth rate is 9.45 per cent, which is below the national average of 11.13 per cent as shown in Figure 8.

Figure 8: Mandera County services sector GVA growth rate

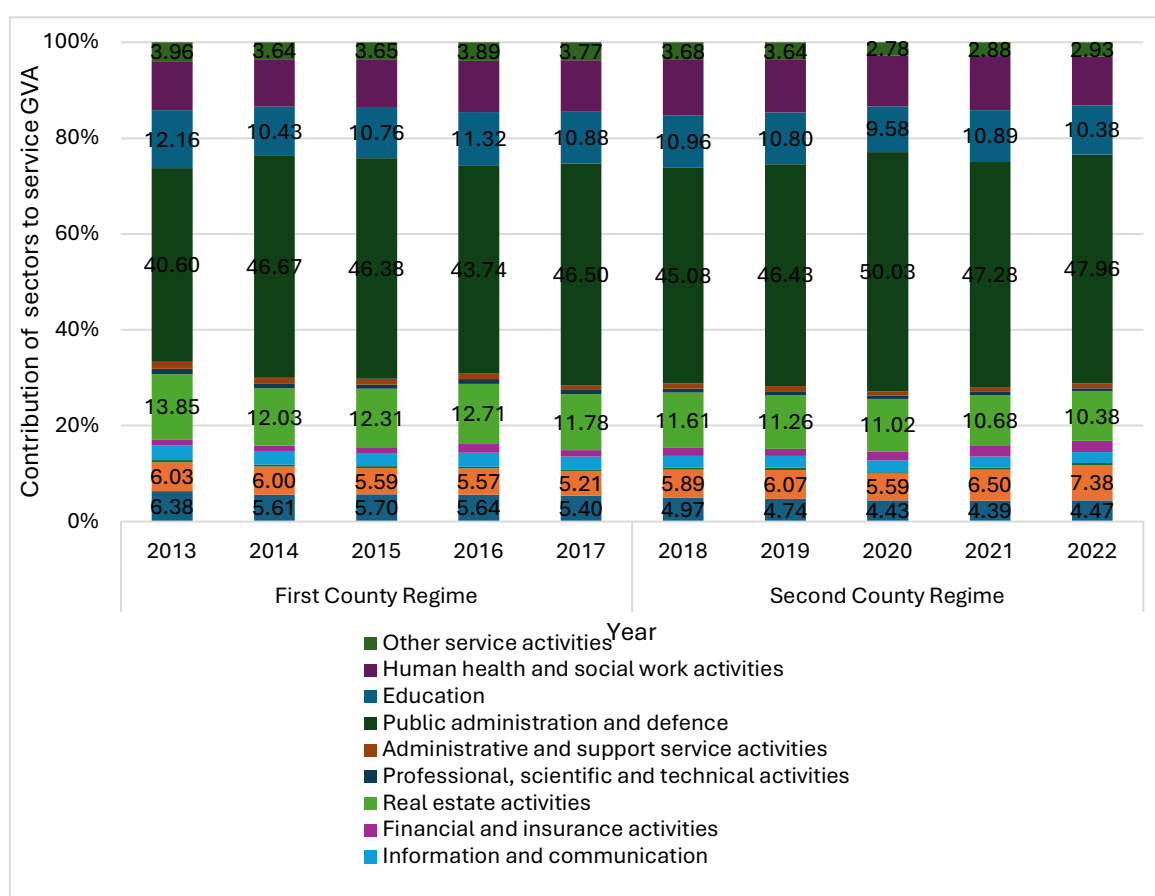


Data source: KNBS GCP (2023)

The public administration and defence sub-sector – a non-market service – dominate the services sector with the highest contribution to services GVA at 46.07 per cent. The real estate activities sector is the second highest contributor to services GVA at 11.76 per cent. The education sub-sector is third at an average of 10.82 per cent as shown in Figure 9.

The tourism potential in the county has not been fully exploited as the contribution by accommodation and food services is very low contributing between 2-3 per cent to the services GVA. Mandera County has one national reserve namely Malka Mari National Park, which is the least visited in the country. The county has potential for cultural tourism through the annual Somali Cultural Festival and desert tourism at Rhamu Sand Dunes.

Figure 9: Contribution of sectors to service sector GVA



Data source: GCP 2023

Quantity and Quality of Labour for Mandera County

Mandera County has a total working-age population of 379,079, which is less than half of the total county population at about 43.70 per cent. This indicates a relatively lower quantity of labour. The majority of the working-age population is youthful (18-34 years) at 55.05 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 population (%)
15-17	39,922	32,131	72,053	19.01
18 –24	54,874	54,100	108,974	28.75
25-34	48,498	51,219	99,717	26.31
35-64	52,632	45,703	98,335	25.94
Total	195,926	183,153	379,079	

Data source: KPHC 2019

The majority of the population in Mandera sub-counties are persons in the working age categories. Mandera East has the highest percentage of working-age persons at 48.91 per cent as observed 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 percentage of the total sub-county population
		15-17	18 – 24	25 – 34	35-64	
Mandera West	98,296	7,091 (18.23)	11,259 (28.94)	10,823 (27.82)	9,735 (25.02)	38,908 (39.58)

Banisa	152,589	9,646 (14.90)	17,800 (27.49)	18,670 (28.83)	18,641 (28.79)	64,757 (42.44)
Kotulo	72,392	6,034 (19.83)	8,112 (26.66)	8,150 (26.78)	8,132 (26.73)	30,428 (42.03)
Lafey	83,452	8,753 (22.63)	12,258 (31.69)	9,204 (23.80)	8,462 (21.88)	38,677 (46.35)
Mandera Central	157,215	13,872 (21.14)	18,713 (28.52)	16,819 (25.63)	16,213 (24.71)	65,617 (41.74)
Mandera East	159,633	13,344 (17.09)	22,865 (29.28)	20,676 (26.48)	21,198 (27.15)	78,083 (48.91)
Mandera North	143,843	13,313 (21.26)	17,967 (28.70)	15,375 (24.56)	15,954 (25.48)	62,609 (43.53)

Data source: KPHC 2019

In Mandera County, the majority of socioeconomic indicators that affect the quality of labour are lower than the national average as reported in Table 3. Interventions are required to improve literacy rates and health indicators that will improve the quality of labour.

Table 3 : Human capital Indicators

Human capital indicators	County	National average
Literacy rate	47.00	78.41
Pre-primary net enrolment rate (2019)	11.35	67.51
Primary school net enrolment rate (2020)	35.80	77.72
Secondary school net enrolment rate (2020)	11.40	54.18

Average years of schooling (2014)	6.00	7.78
Percentage of children 12 -23 months fully vaccinated (%)	42.70	74.97
Percentage of stunted children	20.50	19.75
Percentage of teenage pregnancy	14.60	15.79
Primary to secondary transition rates (2020)	84.30	86.13
Pupil-teacher ratio (primary school)	39.00	28.28
Food poverty headcount (%)	65.50	33.63
Child Poverty headcount (%)	72.30	42.67

Data source: KDHS 2022, KPHC 2019, Basic Education Statistical Booklet, 2020

The majority of the essential infrastructure and capital indicators that support the production of Mandera County's 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 latent resources.

Table 4: Essential infrastructure and other resources indicators

Essential infrastructure indicators	County	National average
Percentage of households with access to electricity (2019 Census)	15.70	38.52
Distribution of population using the internet (2019 census)	7.80	18.69
Rural Access Index (2018)	4.05	63.72
Access to improved sanitation (2018)	41.00	59.04

Access to improved water (2018)	32.80	65.33
Financial inclusion level (2021)	83.80	81.01
The proportion of primary schools with internet	26.45	27.65
Proportion of secondary schools with functional internet	9.20	35.13
Percentage of households by housing material composite-finished materials(adequate) (2019)	18.67	51.71
Percentage of households using bank usage (overall)	10.90	38.18
Percentage of households using mobile money)	83.70	78.58

Data sources: KRB 2018, KPHC 2019, Fin Access 2021, KIHBS 2015/16

County Employment Statistics

The employment-to-population ratio in Mandera is low at 47.89 per cent. The majority of those working is the youthful working population (18- 34 years) at about 26.30 per cent while those between 35-64 years at 14.64 per cent as shown in Table 5. This indicates low utilization of the non-youth category and a low quantity of labour. There is little disparity in employment by gender as the percentage of the males employed is 35.40 per cent while females are at 34.52 per cent. The unemployment rate in Mandera County is high at 24.09 per cent with unemployment being slightly higher for the youth (18-34 years) at 13.72 per cent and those between 35-64 years at 6.22 per cent.

There is a high percentage of persons aged 5-17 years working at 46.59 per cent. The cultural practices may explain this as children and teenagers in pastoral communities play an important role in livestock production as they graze the livestock. Although this is crucial 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 frequent droughts that force communities to migrate in search of resources could also be a

contributing factor. Incidences of insecurity that disrupt learning activities are also a possible cause of the high number of out-of-school children who are engaged in economic activities.

The inactivity rate for the youth category is 16.79 per cent while for the non-youth is 10.23 per cent. The higher inactivity rates for persons of prime age in the arid counties compared with the other counties is of concern as it indicates lower labour utilization.

Table 5: Mandera County employment statistics

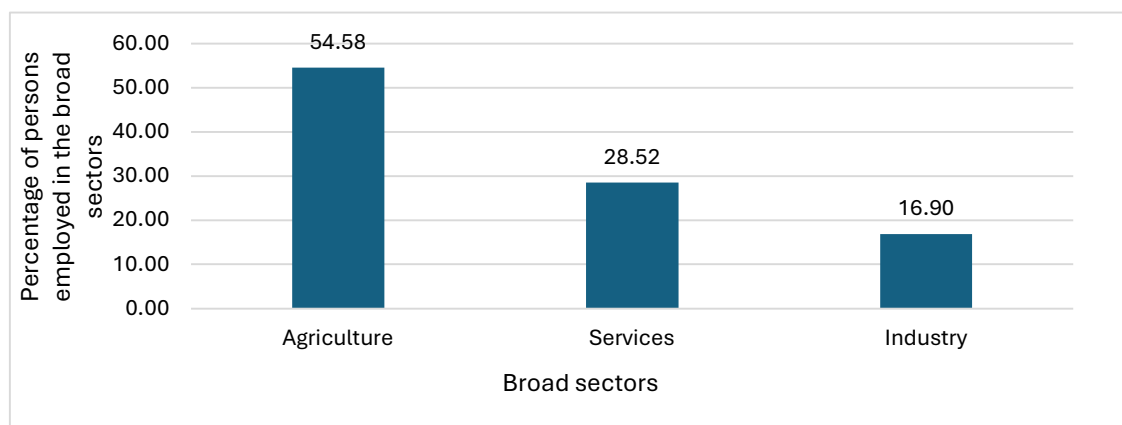
Employment statistics	Youth	Non-youth
Employment to population ratio (%)	26.30	14.64
Unemployment rate	13.72	6.22
Percentage of persons 5–17 years old working	46.59	-
Inactivity rate	16.79	10.23

Data source: KNBS KPHC 2019

Sectoral Employment

The agriculture sector is the highest employer in Mandera County at 54.58 per cent followed by the services sector at 28.52 per cent. The industry sector is third at 16.90 per cent as shown in Figure 10.

Figure 10: Percentage of persons employed in the broad sectors

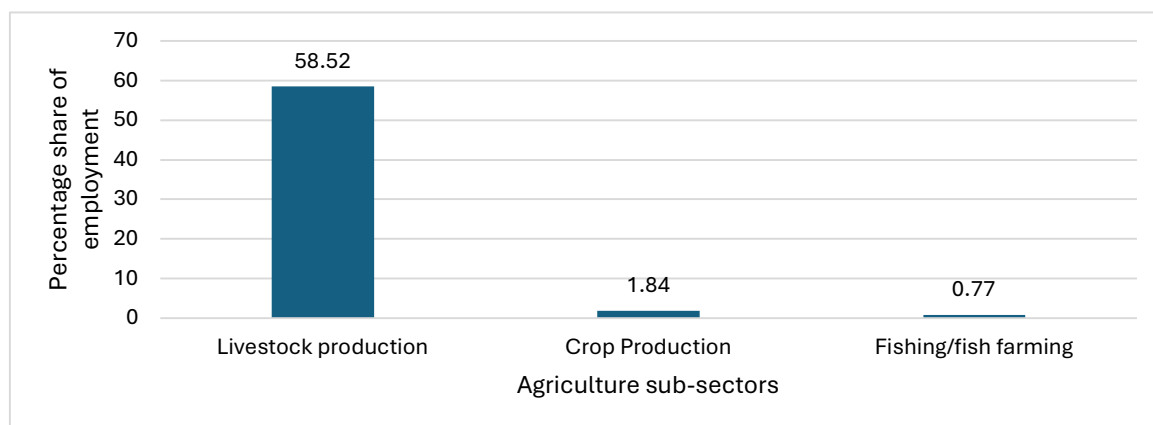


Data source: KCHS 2021

Agriculture Sector

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

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

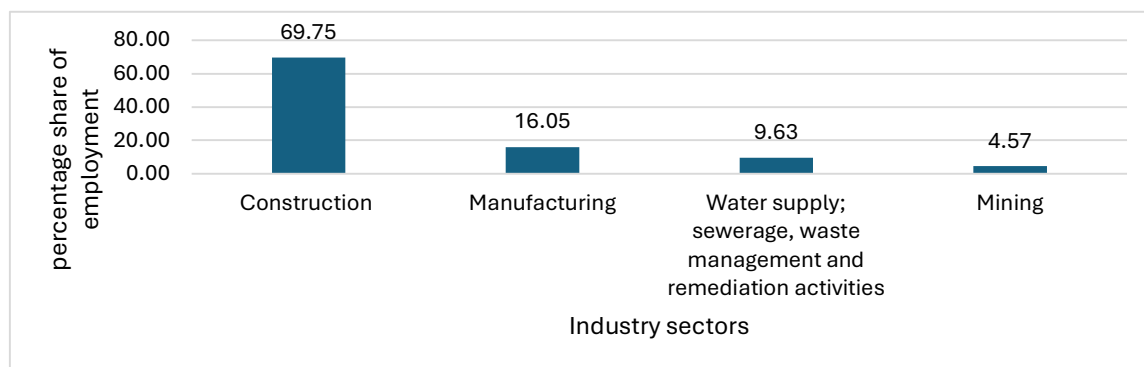


Data source: KCHS 2021

Industry Sector

The majority of those working in the industry sector are in the construction of buildings as shown in Figure 12. The construction sector is highly volatile, and employment in the sector is subject to significant fluctuations. The construction industry is also subject to seasonal employment patterns raising concerns over the sustainability of employment in the sector.

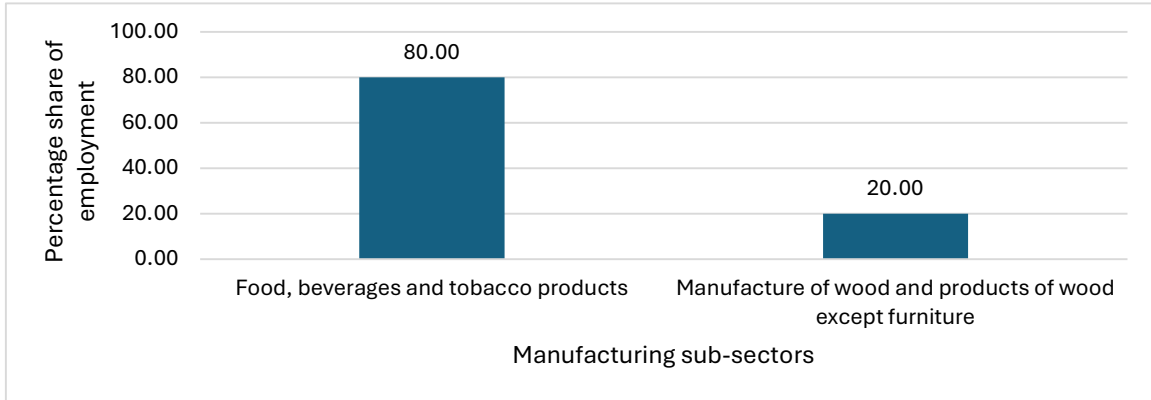
Figure 12: Percentage share of employment in the industry sectors



Data source: KCHS 2021

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 wood industries as shown in Figure 13.

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

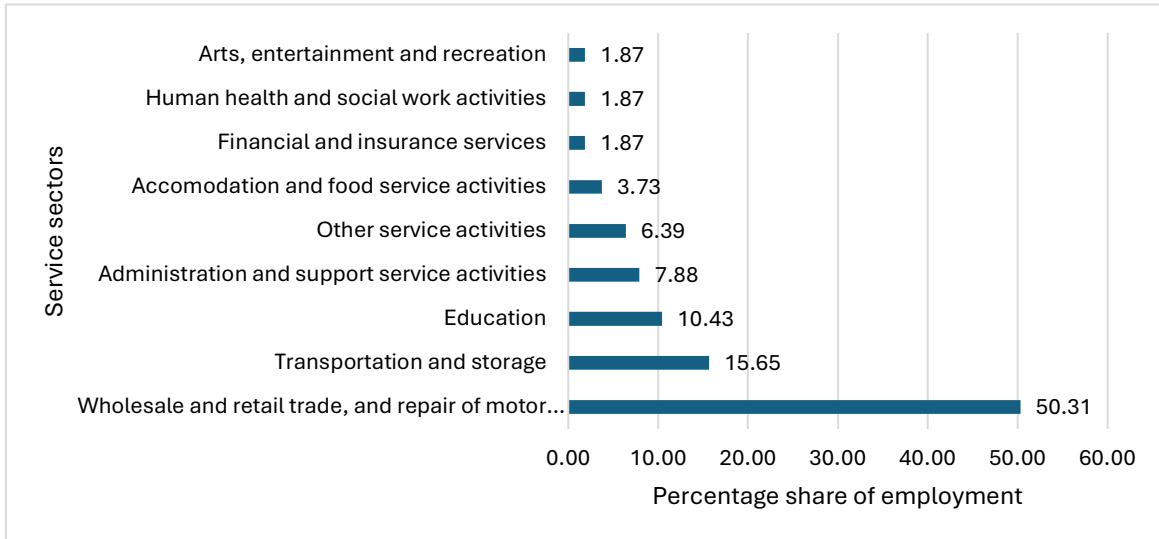


Data source: KCHS 2021

Services Sector

The majority of those working in the services sector are in wholesale and retail trade, which is dominated by the informal sector (Figure 14).

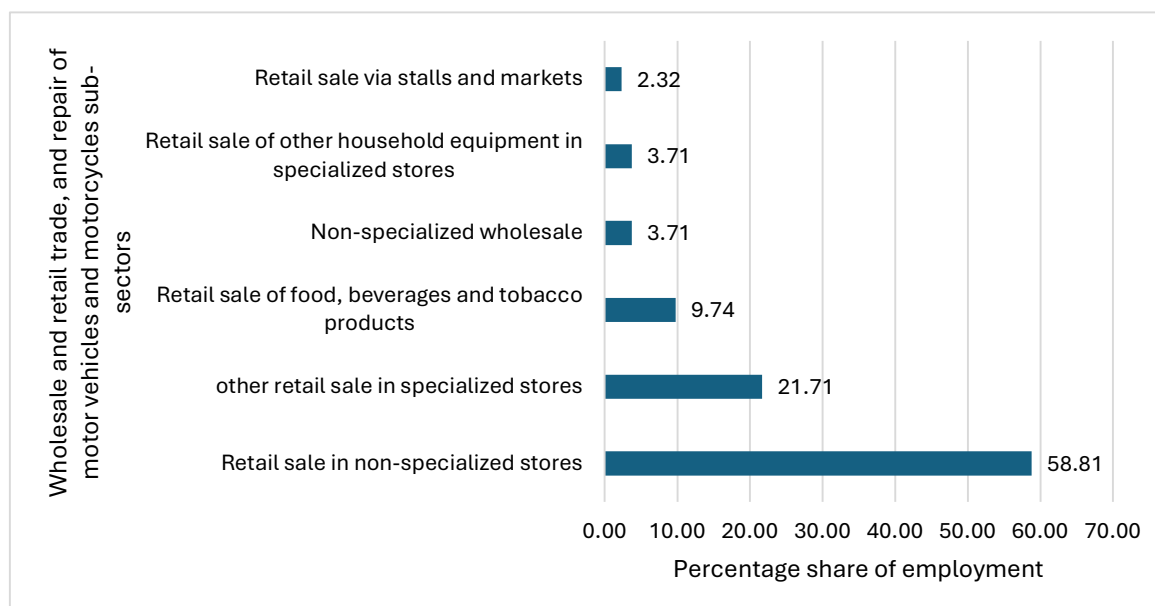
Figure 14: Percentage share of employment in the service sector



Data source: KCHS 2021

In the wholesale and retail trade sub-sector, the majority work in retail in non-specialized stores as shown in Figure 15.

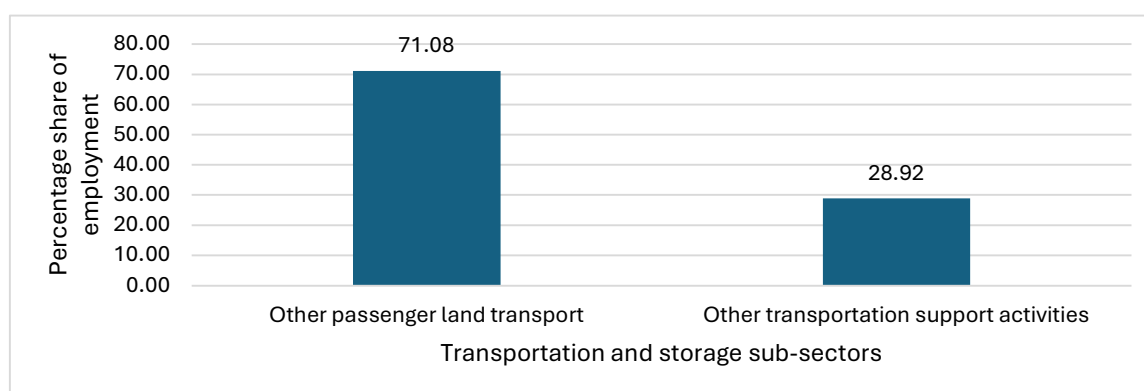
Figure 15: Percentage of persons employed in the wholesale and retail trade, and repair of motor vehicle sub-sectors



Data source: KCHS 2021

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

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

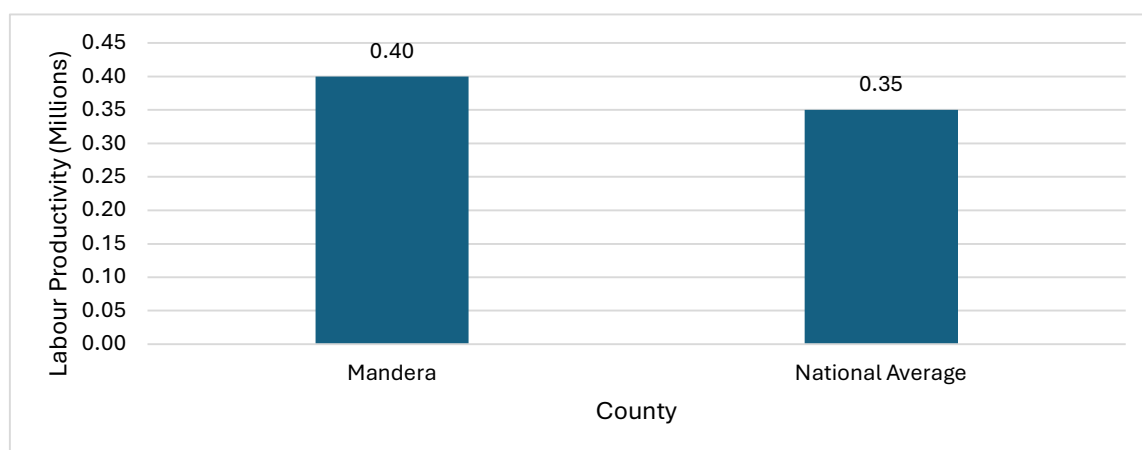


Data source: KCHS 2021

Labour Productivity

Labour productivity for Mandera County is 0.40 per cent, which is above the national average labour productivity of 0.35 per cent as shown in Figure 17.

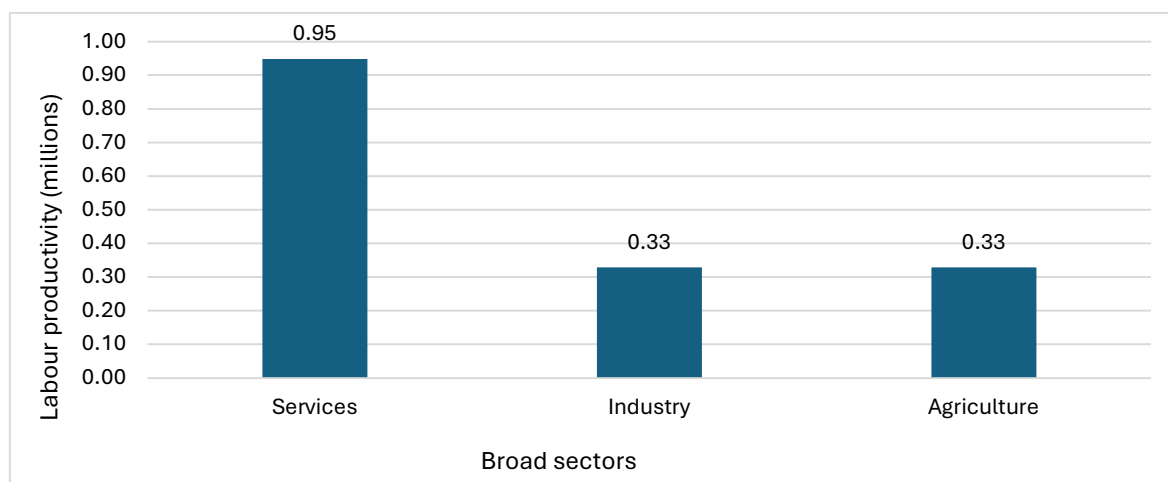
Figure 17: Labour productivity ratios (millions)



Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

The services sector had the highest productivity at 0.95 per cent, followed by the industry and agriculture sectors both at 0.33 per cent as shown in Figure 18.

Figure 18: Labour productivity by sectors

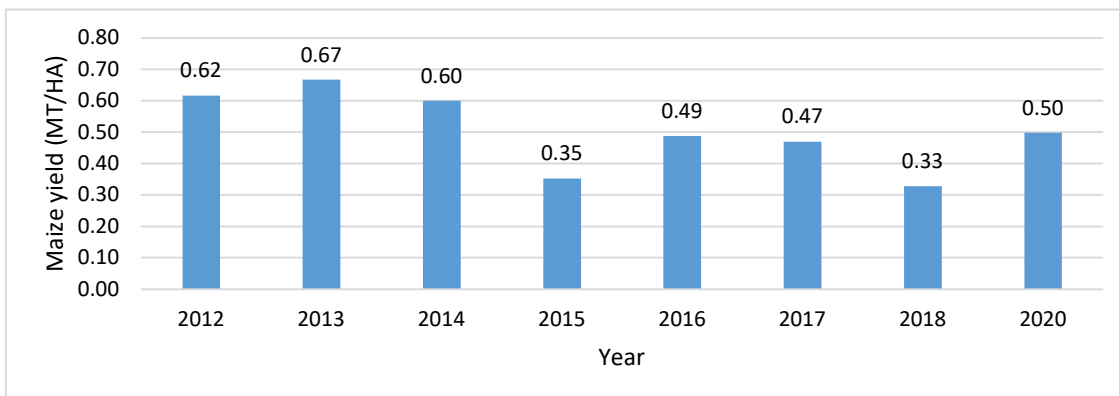


Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

Agriculture Sector

In agriculture, maize yield is very low in Mandera County at an average of 0.50 MT/HA. This is attributed to dependence on rainfed agriculture in the face of high aridity levels and episodic drought shocks. The 2014 drought episode contributed to the lowest maize yield in 2015 as shown in Figure 19.

Figure 19: Maize yield (MT/HA)

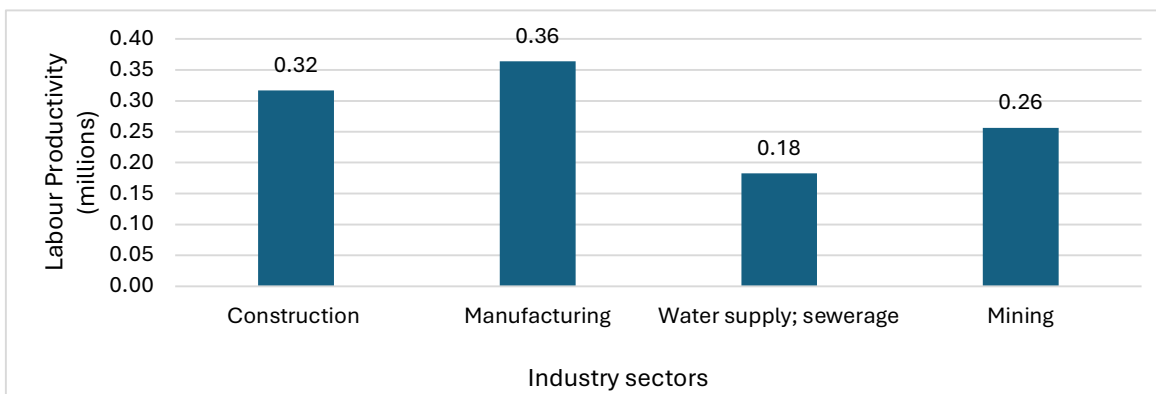


Data source: Author's computation using NIPFN (2020) data and KNBS KCHS (2020)

Industry Sector

Manufacturing and construction sectors had the highest labour productivity in the industry broad sector as shown in Figure 20.

Figure 20: Labour productivity by industry sectors

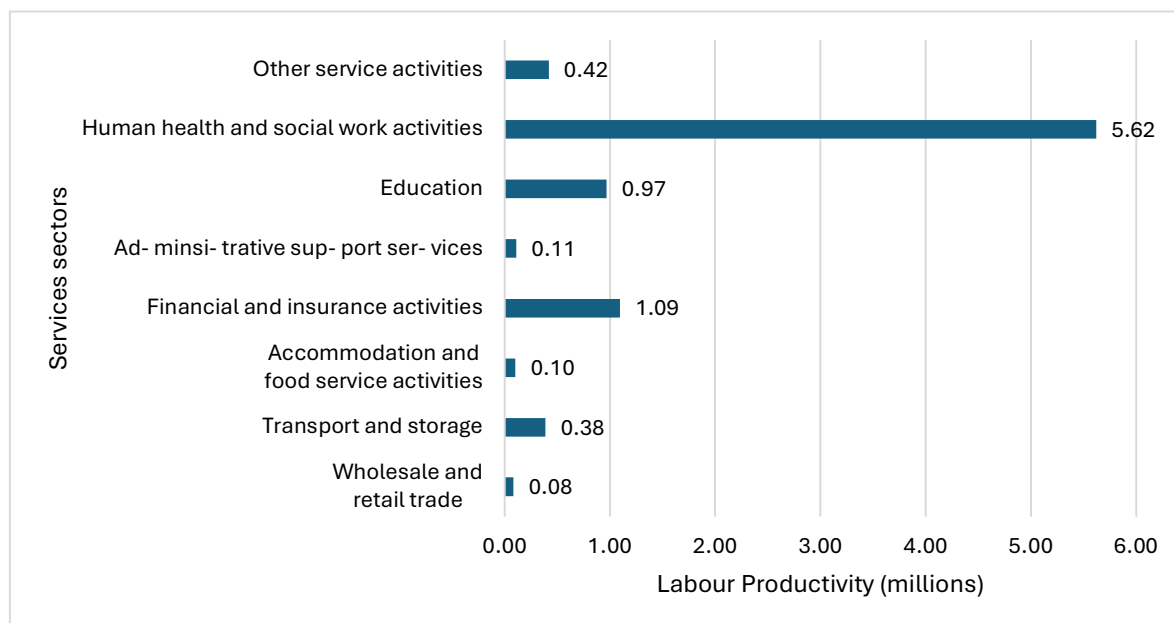


Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

Services sector

The human health and social work sector has relatively higher labour productivity when compared with other sectors within the services broad sector. The wholesale and retail trade sub-sector, which had the highest employment in the services sector had the lowest labour productivity as observed in Figure 21.

Figure 21: Labour productivity in services sectors



Data source: Author's computation using KNBS GCP 2023 and KCHS 2021 data

Key Messages

- (i) Climate change effects with highly frequent and severe droughts are inhibiting the growth of Mandera County's economy and the full realization of its livestock production potential. Mandera County has comparative advantages in livestock production, but the low-marketed hides and skins indicate that livestock production is yet to be fully integrated into the leather value chain.
- (ii) The non-market service dominates the services sector indicating lower output from the market-oriented services. There is a significant proportion in the retail of non-specialized products.
- (iii) Majority of socioeconomic indicators that affect the quality of labour are lower than the national average in Mandera County. Interventions are required to improve

literacy rates and health indicators including stunting and teenage pregnancy will improve the quality of labour.

- (iv) 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 for interventions to improve the quality and quantity of essential infrastructure to enable the county to exploit latent resources.
- (v) Employment ratio in Mandera is low at 47.89 per cent, most of those working are the youthful working population (18- 34 years) at about 26.30 per cent while those between 35-64 years at 14.64 per cent. This shows low utilization of the non-youth category and low quantity of labour. The unemployment rate in the county is high at 24.09 per cent with unemployment being slightly higher for the youth (18-34 years) at 13.72 per cent compared to those between 35-64 years at 6.22 per cent. There is a high percentage of persons aged 5-17 years working at 46.59 per cent. Cultural practices, insecurity, and droughts are the likely causes. The high out-of-school children who are engaged in economic activities hinder the early attainment of formal skills that are needed for alternative livelihoods and the industrial transformation of counties. The inactivity rate for the non-youth is high at 10.23 per cent. The higher inactivity rates for persons of prime age in the arid counties compared with the other counties is of concern as it indicates lower labour utilization.
- (vi) The agriculture sector is the highest employer in Mandera County at 54.58 per cent despite the climate change challenges and lower output from agriculture. 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 wood processing industries. The majority of those working in the service sectors are in wholesale and retail trade, which is dominated by the informal sector.
- (vii) Labour productivity for Mandera County is 0.40 per cent, which is above the national average labour productivity of 0.35 per cent. Labour productivity in the agriculture sector is the lowest, which can be explained by the effects of drought on agricultural output in the county.

Policy Recommendations

- (i) Build climate resilience in the livestock sub-sector in arid counties. This can be achieved through, 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. Optimal utilization of the information provided by the National Drought Management Authority through the drought early warning systems to encourage commercial offtake of livestock to help 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) Exploit optimally the livestock value through the integration of livestock production into the leather value chain. This can be achieved by increasing the supply of hides and skins through strategies such as 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 to increase producers bargaining power. This needs to go in tandem with efforts that would increase the number of leather processing facilities by providing incentives to local leather product manufacturers to establish tanneries in arid counties.

- (iii) Encourage the development of market-oriented services by leveraging tourism resources to reduce the dominance of non-market services. Although Mandera County has three national reserves with unique wildlife, the number of local and international tourists remains low. To market the tourist sites in the counties to encourage local and international tourism. There is also a need to incentivize players in the hotel and accommodation to invest in tourist facilities in arid counties. Leveraging cultural tourism and desert safaris that are unique to the region.
- (iv) Create an enabling environment to attract investment in industries that would provide employment opportunities. Also, increase funding to businesses established by vulnerable groups such as women and youth to ensure inclusive support of persons in the informal sector.
- (v) To improve the quality of labour in Mandera County the national government needs to encourage participation in the adult and continuing education programme to improve the quality of the current labour force. This can be done through increasing awareness campaigns on the benefits of adult learning targeting out-of-school youth and adults in the county. Further, improve the effectiveness of adult learning centres in Mandera County by investing in mobile adult learning centres that target nomadic pastoralists who move during droughts. Increase funding to the adult and continuing education programme to increase the number of facilities and trainers. Also, increase funding to the programmes being implemented by NACONEK such as mobile schools, school feeding programmes, and low-cost boarding schools.

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For More Information Contact:

Kenya Institute for Public Policy Research and Analysis
Bishops Road, Bishops Garden Towers
P.O. Box 56445-00200, Nairobi
Tel: 2719933/4, Cell: 0736712724, 0724256078
Email: admin@kippra.or.ke
Website: <http://www.kippra.org>
Twitter: @kippra.kenya