FACTSHEET

KENYA JOINT MARKET MONITORING INITIATIVE (JMMI)

Q1 2023 (January - March)

KEY MESSAGES

- The overall cost of the Minimum Expenditure Basket (MEB)[1] has increased from KES 17,425 at the end of Q4 2022 to KES 18,455 at the end of Q1 2023. **Samburu and Marsabit counties were found to have a greater increase of the cost of the MEB (28% and 20% respectively).** Moreover, the price of food MEB rose notably in all assessed counties, especially in Baringo County (21%).
- **Marsabit County was found to have the highest cost of the MEB** (KES 21,242).
- A considerably high proportion **(74%)** of vendors **reportedly experienced difficulties** keeping their businesses operational and well-stocked at the time of data collection. The top reported difficulty was the high price charged by suppliers (59%).
- Similar to Q4 2022, increase in the market price (77%) and high transportation cost (64%) were the top reported causes of commodity shortages experienced by vendors in the 3 months prior to data collection.

ASSESSED COUNTIES AND MEDIAN MEB VALUES

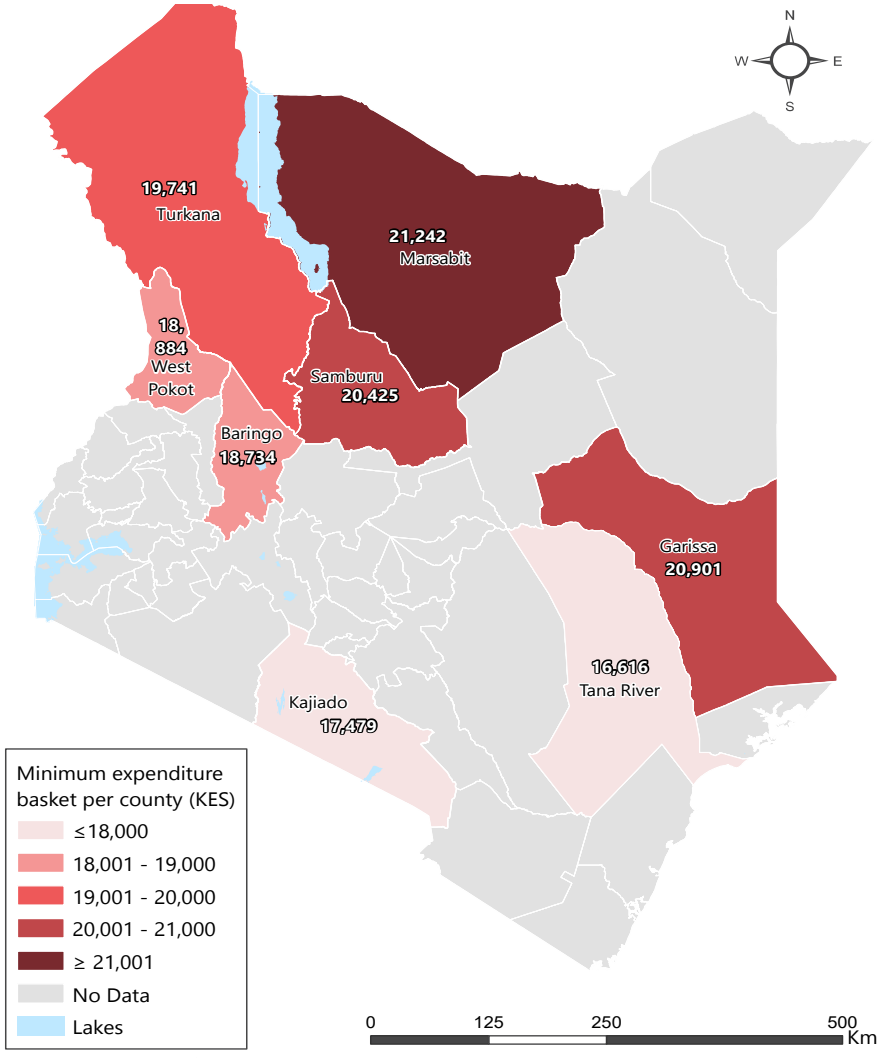


Figure 1: Map of Q1 2023 assessed counties and MEB values

CONTEXT & RATIONALE

The Kenya Cash Working Group (KCWG) initiated the JMMI in March 2022 to inform cash and voucher assistance (CVA) in the ASAL counties, as well as to enable regular updates of the MEB.

The drought situation in Kenya was critical, marked by five consecutive below average rainy seasons coupled with the high temperatures recorded across the country. The ongoing March-April-May rainfall season resulted in a positive impact across most of arid and semi-arid (ASAL) counties indicating recovery drought phase situation. 13 of the 23 ASAL counties are in the recovery drought phase following the drought phase classification.[2]

According to data from the Energy and Petroleum Regulatory Authority (EPRA),[3] fuel prices increased between December 2022 and March 2023 contributing to high food prices from the impact on the increased cost of transportation. A majority (75%) of the interviewed vendors during the Q1 2023 JMMI commonly reported high transportation costs as the main transportation challenge faced. Moreover, high transportation costs were the second most reported cause of commodity shortages, as reported by 64% of vendors.

METHODOLOGY:

Data was collected between 26th March 2023 and 16th April 2023 by partners through key informant interviews with market vendors. For each assessed market, enumerators recorded at least 3 prices for each assessed food and non-food items as well as other market indicators. Findings are presented at county level and should be considered indicative of the assessed location and the time frame in which the data was collected. For more information on the methodology please refer to page 8.

Q1 2023 COVERAGE SUMMARY:

832	**Vendors interviewed**
117	**Markets covered**
34	**Food and Non Food Items assessed**
8	**Assessed counties**
5	**Participating agencies**

ONLINE DASHBOARD

An interactive dashboard is available online to facilitate the interaction and ease navigation with the data. For instance, compare the cost of the Minimum Expenditure Basket (MEB) in different ASAL Counties of Kenya. To use the online dashboard, click here.

ABOUT THE MEB

The MEB[1] is composed of essential commodities and services which is used as an operational tool to identify and quantify the average minimum cost of the culturally adjusted basic items required to support a six-person household for one month. The cost of the MEB can be used as a proxy for the financial burdens facing a six person household for one month.

MEB COMPONENTS

Sector	Item	Quantity
Food items	Maize flour	32.25 Kg
	Rice	22.5 Kg
	Cow peas	7.5 Kg
	Dried beans	7.5 Kg
	Vegetables oil	5.25 l
	Cow milk, whole, not fortified	22.5 Kg
	Leafy vegetables, dark green	15 Kg
	Salt, Iodized	0.75 Kg
	Sugar	0.75 Kg
WASH	Water	1,125 l
	Multi-purpose soap	2.2 Kg
	Toothpaste	0.425 l
	Sanitary pads (8 pack)	2 packs
Education	School materials (pen, pencil, book, rubber and sharpener)	2 Kits
Energy	Charcoal	12 Kg
	Solar lamp	1 piece
Health	National health insurance fund	KES 500
	Communication (airtime)	KES 300
Transport	Public transportation	KES 200

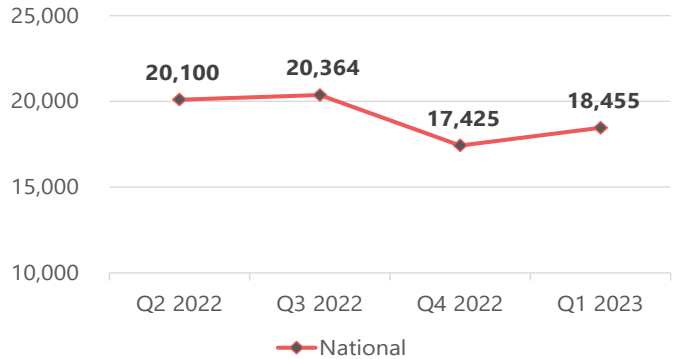
Cost of the MEB in KES[5] and change since previous round (Q4 2022)

County	Food MEB	Change	Non-food items MEB	Change	MEB	Change
Marsabit	14,934	16.5% ▲	6,308	28.6% ▲	21,242	19.8% ▲
Garissa	16,178	17.1% ▲	4,724	5.1% ▼	20,901	11.2% ▲
Samburu	14,033	17.6% ▲	6,393	58.1% ▲	20,425	27.9% ▲
Turkana	15,432	10.2% ▲	4,308	6.4% ▼	19,741	6.1% ▲
West Pokot	14,063	9.3% ▲	4,822	1.7% ▼	18,884	6.3% ▲
Baringo	15,063	20.6% ▲	3,671	1.9% ▲	18,734	16.4% ▲
Kajiado	13,257	15.8% ▲	4,221	31% ▼	17,479	0.5% ▼
Tana River	12,413	0.7% ▲	4,203	0.3% ▼	16,616	0.5% ▲

- The overall cost of MEB has increased across all the counties between Q4 2022 and Q1 2023, except Kajiado County which slightly decreased by 0.5%. The **biggest increase (27.9%) was observed in Samburu County.**
- **There was an increase in the price of food basket items across all assessed counties.** The increase is likely a result of the high transport cost as reported by 65% of the vendors. Additionally, difficulty with the high price of commodities charged by supplier (59%) was the most common cited restocking challenge faced by vendors.
- Despite the overall increase in the cost of MEB in most counties, **in Kajiado, median prices of some non-food items decreased particularly starkly compared to the previous round: the median price of water, for instance, decreased by 86%.**
- **Marsabit County was found to have the highest cost of the MEB** (KES 21,242). There was a notable increase in the price of the food items basket (16.5%), particularly milk which doubled from KES 70 to KES 140. Similarly, the price of non-food items increased greatly (28.6%). Price of refilling a 20 liter jerrycan of water increased notably from KES 5 to KES 33.
- **Tana River (KES 16,616)** was found to **have the lowest cost of the MEB**. In comparison to Q4 2022, the cost of the MEB slightly increased by 0.5%.

NATIONAL MEB

Overall, the price of the national MEB increased from KES 17,425 in Q4 2022 to KES 18,455.



Median price of items per County in KES

Item	Overall median cost	% Change*	Baringo	Garissa	Kajiado	Marsabit	Samburu	Tana River	Turkana	West Pokot
White maize (1 Kg)	83 ▼	-8%	85	60	90	80	80	70	100	100
Maize flour (1 Kg)	103 •	3%	100	110	100	105	90	100	120	110
Beans (1 Kg)	160 ▲	14%	200	160	150	150	160	180	140	200
Cow peas (1 Kg)	130 •	0%	147	na	140	120	134.5	130	120	100
Pigeon peas (1 Kg)	138 ▲	6%	na	na	135	100	na	140	142.5	na
Rice (1 Kg)	120 •	0%	135	150	120	120	120	110	120	130
Sugar (1 Kg)	160 •	0%	180	160	160	160	160	160	200	170
Wheat flour (1 Kg)	120 ▲	9%	115	120	110	120	120	110	120	125
Vegetable oil (1 l)	300 ▲	25%	300	350	260	320	300	260	300	330
Tea leaves (50 g)	25 •	0%	33	20	20	25	25	20	30	30
Salt (1 Kg)	43 ▲	42%	50	30	50	40	35	40	50	75
Cattle milk (1 l)	166 ▲	59%	140	120	120	140	135	75	160	120
Camel milk (1 l)	150 ▲	25%	150	130	200	180	150	na	100	100
Onions (1 Kg)	80 ▲	25%	102.5	100	80	100	90	120	120	100
Tomatoes (1 Kg)	100 ▲	43%	97.5	120	70	100	100	100	120	100
Kale (1 Kg)	80 ▼	-11%	80	150	60	70	95	80	100	50
Spinach (1 Kg)	78 ▼	-23%	75	150	60	50	100	80	80	50
Traditional vegetables (1 Kg)	93 ▼	-8%	105	na	70	250	na	80	130	50
Cabbage (500 g)	166 ▲	59%	150	150	120	150	100	80	135	50
Soap (200 g)	50 ▲	25%	50	50	50	50	50	50	30	30
Jerry can (20 l)	200 ▲	33%	250	200	100	200	200	120	200	220
Bucket (20 l)	250 •	0%	250	250	275	275	200	200	250	200
Sanitary pads (8 pack)	80 •	0%	55	100	70	100	80	80	100	67.5
LPG 6KG refill	1,400 ▲	8%	1,450	na	1,325	1,400	1,525	1,400	1,500	1,400
Firewood (1 bundle)	100 ▲	0%	100	95	150	300	150	100	100	100
Charcoal (2 Kg)	70 ▲	40%	35	100	70	200	50	50	50	80
Kerosene (1 l)	166 ▲	4%	165	167.5	170	150	180	165	120	200
Pencil (1 pc)	10 •	0%	10	10	10	10	10	5	10	5
Pen (1 pc)	10 •	0%	10	15	10	10	15	10	10	15
Exercise book (1 pc)	15 •	0%	15	20	20	15	15	15	20	10
Rubber (1 pc)	6 ▼	-38%	5	10	5	7.5	10	5	10	5
Water refill from borehole (20 l)	14 ▲	38%	5	15	5	32.5	50	12.5	12.5	20
Toothpaste (15 ml)	30 ▼	-14%	30	30	30	30	30	30	30	35
Solar lamp (1 pc)	500 ▼	-17%	500	450	800	500	500	500	725	600

KEY

- ▲ Large increase (> 70%)
- ▲ Medium increase (31% to 70%)
- ▲ Small increase (5% to 30%)
- • Minor change (-5% to 5%)
- ▼ Small decrease (-5% to -30%)
- ▼ Medium decrease (-31% to -70%)

na: no price data available.
* Change of overall median cost since Q4 2022

AVAILABLE STOCK, TIME NEEDED TO RESTOCK, AND CURRENT AVAILABILITY OF ITEM IN THE MARKET

Item	Wide availability (% KIs)	Limited availability (% KIs)	Complete unavailability (% KIs)	Remaining stock (days)	Days needed to restock (days)
White maize	73%	25%	1%	16	3
Maize flour	85%	15%	0%	14	3
Beans	74%	25%	1%	17	3
Cow peas	58%	39%	3%	14	4
Pigeon peas	46%	54%	0%	18	4
Rice	90%	9%	0%	15	3
Sugar	90%	9%	1%	14	3
Wheat flour	90%	10%	0%	15	3
Vegetable oil	88%	12%	0%	14	3
Tea leaves	95%	4%	0%	16	3
Salt	96%	4%	1%	21	4
Cattle milk	79%	19%	2%	7	2
Camel milk	38%	57%	5%	1	1
Onions	77%	22%	0%	7	2
Tomatoes	73%	27%	0%	4	2
Kales	60%	35%	5%	2	2
Spinach	57%	39%	4%	2	2
Traditional vegetables	61%	39%	0%	2	2
Cabbage	61%	38%	1%	4	2
Soap	93%	7%	1%	17	3
Jerry can	80%	19%	0%	20	4
Plastic bucket	81%	16%	1%	27	9
Sanitary pads	95%	5%	0%	24	3
LPG 6KG refill	58%	43%	0%	18	7
Firewood	74%	25%	1%	5	2
Charcoal	70%	29%	0%	8	2
Kerosene	50%	46%	4%	18	5
Pencil	92%	8%	0%	28	4
Pen	93%	7%	0%	28	4
Exercise book	91%	8%	0%	27	4
Rubber	92%	6%	0%	33	6
Toothpaste	90%	9%	0%	19	5
Solar lamp	56%	44%	0%	24	4

The average reported number of days needed to restock food items (3 days) was less than the average number of days needed to restock non-food items (4 days). The average number of days required for restocking (3 days) was less than the average reported remaining stock days (15 days) suggesting a low likelihood of commodity shortages.

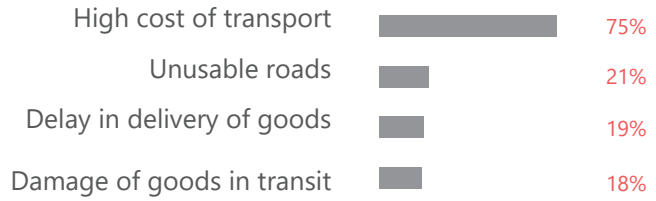
According to the interviewed vendors, salt (96%) and tea leaves (95%) were widely available whereas camel milk and pigeon peas were noted to have limited availability (57% and 54% respectively).

Vendors were only asked about the items they had in stock at the time of data collection. In addition, they were asked about availability within the marketplace and beyond their own business.

A considerable proportion of vendors (49%)[6] reported that suppliers delivered commodities directly to their shops when they needed to restock. However, 60%[6] of vendors reported that they had to travel to get some commodities from the suppliers. Since most vendors (75%)[6] reported high transportation costs as a challenge, it is likely that transportation costs are among the factors driving up prices for some commodities.

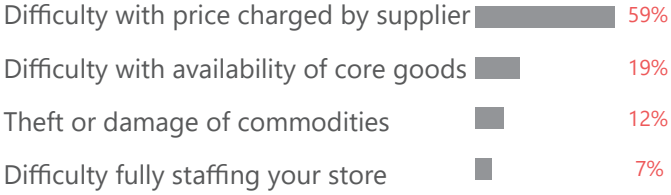
The most common means of transport for both vendors and suppliers were vehicles (60%) and motorcycles (21%). Only 11% of vendors reported that they or their suppliers did not face challenges when transporting commodities to the market.

Figure 2: Most reported transportation challenges, by % of vendors who reported they or their suppliers had faced transportation challenges in the 3 months prior to data collection (n=740):[6]



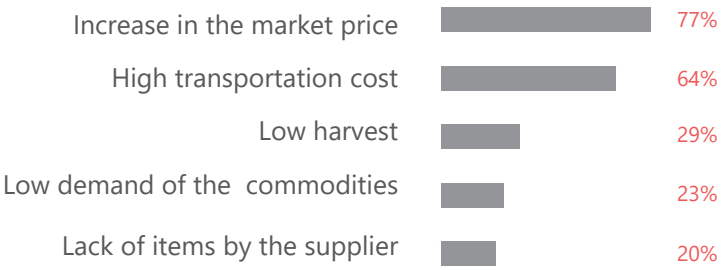
Close to three quarters (74%) of interviewed vendors reported having faced difficulties keeping their businesses operational and well-stocked. Particularly, interviewed vendors in Baringo (100%) reported difficulties in restocking most of the commodities. Vendors in Baringo (72%), Turkana (69%), Kajiado (67%) and Tana River (62%) regarded difficulty with prices charged by the supplier as the main challenge faced.

Figure 3: Most reported restocking challenges, by % of vendors who reported experiencing difficulties keeping their business operational and well-stocked at the time of data collection (n=618):[6]



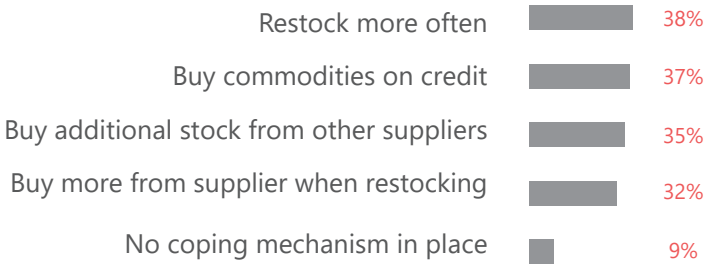
A high proportion of vendors (91%) reported having access to a locked or secured facility within the marketplace in the 3 months prior to data collection. Of those, 81% reported having a storage facility within their own business premise.

Figure 4: Most reported causes of shortages for commodities, by % of vendors who reported limited availability or complete unavailability of some commodities at the time of data collection (n=384):[6]



The vendors reporting unavailability of some commodities were asked how they addressed unavailability of commodities in the 3 months prior to data collection, more than a third of them (38%) reported restocking more often.

Figure 5: Most reported strategies used by interviewed vendors to address unavailability of commodities by % of vendors who reported limited availability of some commodities at the time of data collection (n=384):[6]



TYPES OF PAYMENT MODALITIES AVAILABLE TO CUSTOMERS

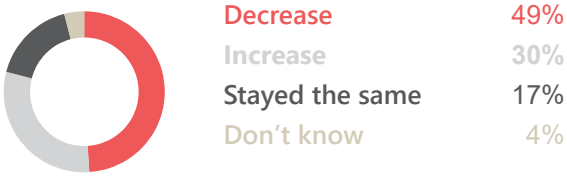
Proportion of vendors reporting accepting different types of payment in the 3 months prior to data collection: [6]

1. 96% Cash
2. 61% Mobile money
3. 22% Informal credit (customers can borrow and pay later)
4. 11% Money transfers
5. 3% Credit/ Debit cards

CHANGE IN NUMBER OF CUSTOMERS AND VENDORS

In addition to restocking challenges, most interviewed vendors (80%) reported that the number of customers buying from their shops had changed in the 3 months prior to data collection, most of whom (80%) reported that this number had decreased.

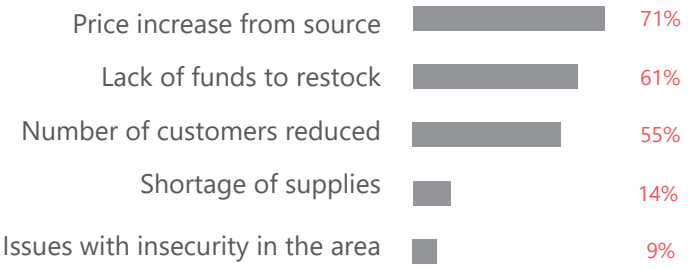
Proportion of vendors reporting on changes in the number of vendors operating in their marketplace in the 3 months prior to data collection:



Out of those vendors (49%) reporting a decrease in the number of vendors operating in the marketplace, the estimated proportion of vendors that had stopped operating their businesses in the 3 months prior to data collection:

Very Few (1%-10%)	29%
Few (11%-25%)	32%
Some (26%-50%)	24%
A lot (51%-75%)	12%
Most (76%-100%)	1%
Do not know	1%

Figure 6: Most reported challenges, by % of vendors reporting that they or other vendors had faced challenges in the 3 months prior to data collection (n=823):[6]



Price increase was the main challenge faced by vendors across the assessed counties; Garissa (82%), Turkana (81%) and Baringo (76%).

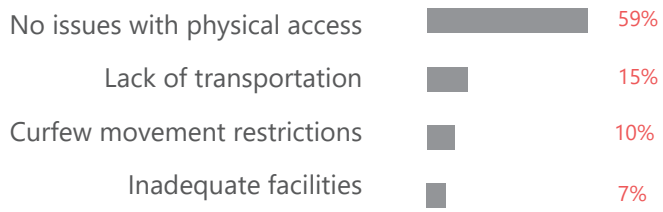
The highest proportion of interviewed vendors citing facing issues with insecurity in the area was found in Baringo (35%), followed by Samburu (28%).

ACCESS TO MARKETPLACES

Physical access to marketplaces

Both customers' and traders' ability to physically access marketplaces is adversely affected as reported by 37% of vendors. The main reported reason across the assessed counties was lack of transportation. The highest percentage was observed in Kajiado (35%) and Garissa (34%) counties. Moreover, West Pokot (52%), Samburu (45%) and Baringo (38%) counties were greatly affected by curfew and movement restrictions imposed by the authorities.[7]

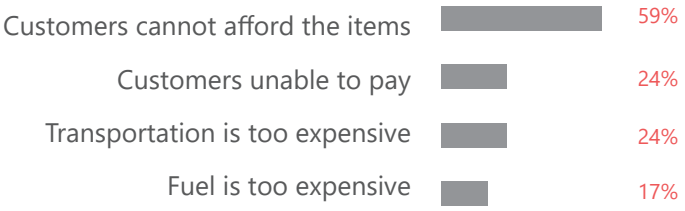
Figure 7: Most reported physical barriers to accessing the marketplace by % of vendors who reported facing challenges in the 3 months prior to data collection (n=310):[6]



Financial Factors

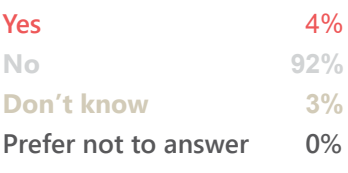
A majority of vendors (59%)[6] reported that customers cannot afford the items available as the main financial challenge faced. Only 17% of vendors reported that most customers do not face any financial challenges to access the marketplace.

Figure 8: Most reported financial barriers to accessing the marketplace by % of vendors who reported customers facing challenges in the 3 months prior to data collection (n=673): [6]



Social Factors

The % of vendors reporting groups of people who sometimes avoided going to the marketplace due to discrimination, exclusion, or feeling unwelcome in the 3 months prior to data collection:



All vendors in Baringo county reported that no groups of people avoided accessing the marketplace due to discrimination or exclusion. Marsabit county reported the highest social barrier faced at 15%.

MARKET FUNCTIONALITY

There is a growing need for humanitarian organizations and decision makers to understand market dynamics to support future cash and voucher assistance (CVA) programming. Aid actors will be more informed on which markets operate efficiently to use cash as a delivery modality during humanitarian response.

Almost a quarter **(21%)** of markets were found to have **limited functionality,** while the majority **(58%)** were found to have **poor functionality.** The remaining 24 markets were not classified due to insufficient data collected in one or more dimensions to inform on the functionality of the market.

Market Functionality Score (MFS)[8] is an extension of the JMMI that spans five key dimensions: **accessibility, availability, affordability, resilience, and infrastructure**. The attribute with the weakest performance was affordability. This can be inferred from the 81% of vendors reporting financial barriers faced by customers in accessing the marketplace. Additionally, 40% of vendors reportedly were unable to predict price changes over the next month from the time of data collection.

MARKET FUNCTIONALITY OF ASSESSED COUNTIES

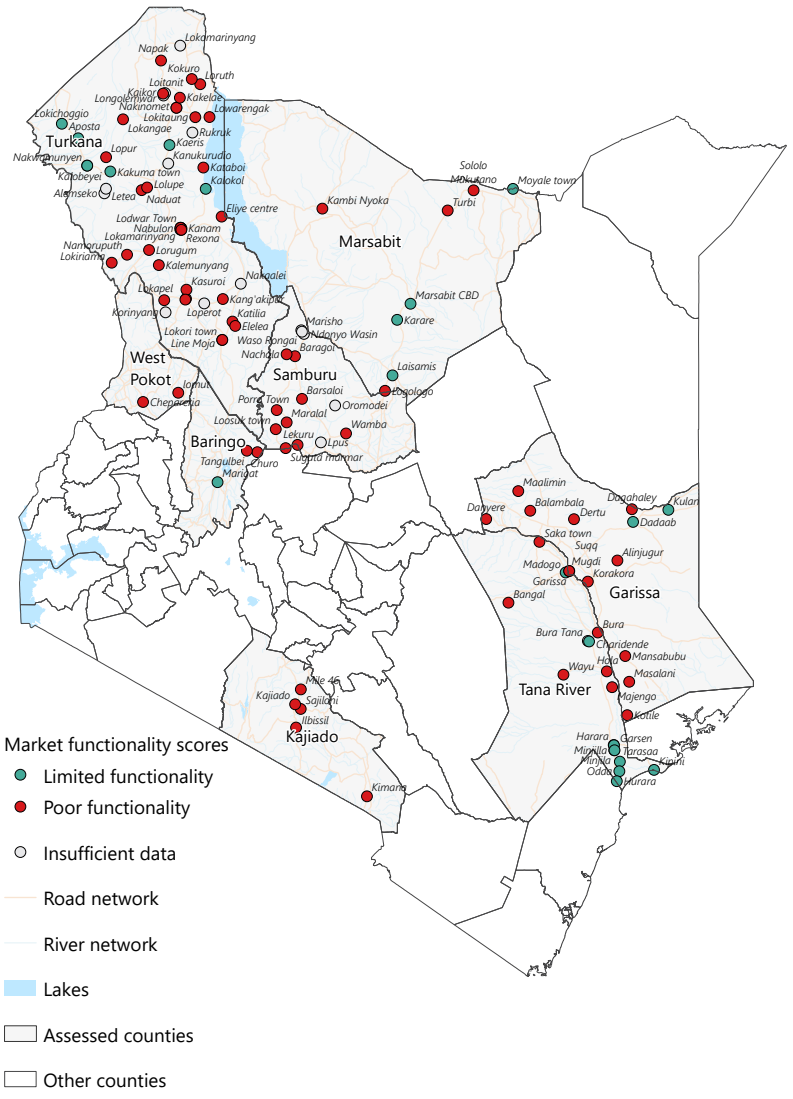


Figure 9: Map of market functionality

SUPPLY

At the time of data collection, 33% of vendors noted that their business depended on a single food supplier. Vendors who rely on a single supplier are vulnerable to supply interruptions. 42% of vendors in Kajiado County relied on a single supplier.

The proportion of vendors reporting relying on a single supplier for non-food item was slightly lower (31%). 40% of vendors in Garissa County relied on a single supplier for non-food items.

Figure 10: % of vendors reporting that they mostly relied on a single supplier for food items at the time of data collection, by county.

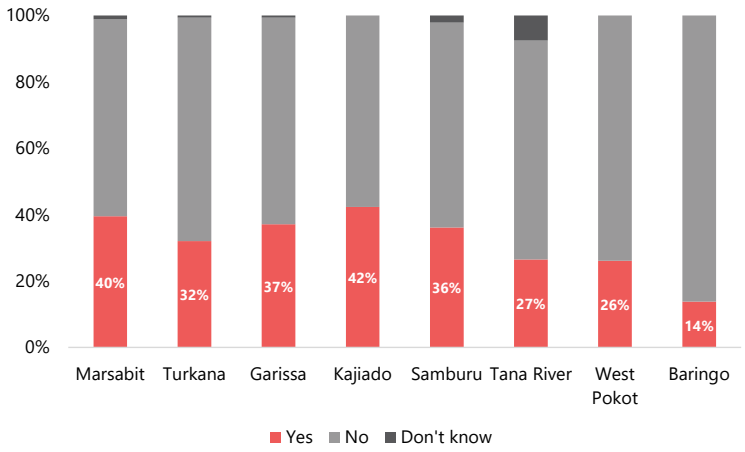
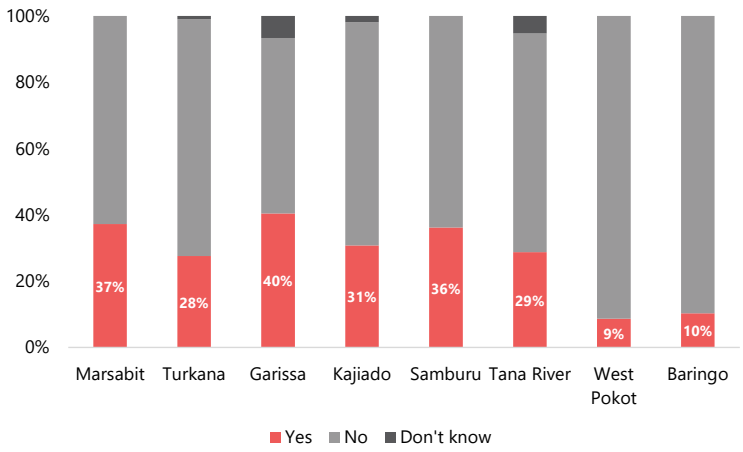


Figure 11: % of vendors reporting that they mostly relied on a single supplier for non-food items at the time of data collection, by county.



MAIN SUPPLY ROUTES

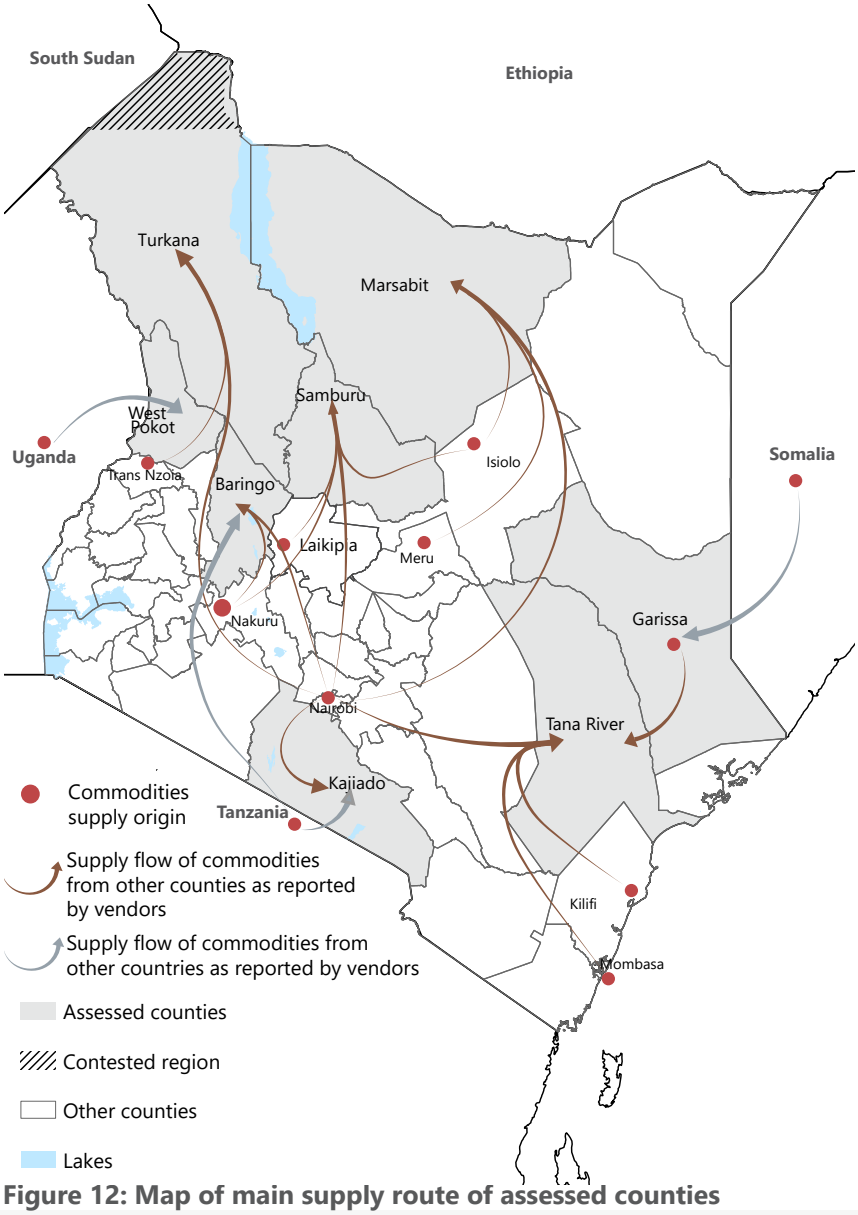


Figure 12: Map of main supply route of assessed counties

The map in Figure 12 visualizes the supply route of commodities from the main supplier as reported by the interviewed vendors.

A high proportion of vendors (96%) noted that their main supplier is located within the country. On the other hand, a few vendors reportedly source their commodities from neighbouring countries namely Tanzania, Ethiopia, and Uganda.

Additionally, according to 80% of vendors from all assessed counties, their main suppliers are primarily located within the respective counties. It is worth noting, few vendors (0.2%) indicated they rely on their own production.

Only 16% of vendors reported relying on bordering counties for their supply of commodities as an alternative. 44% of vendors in Baringo reported that their suppliers are based in Nakuru county.

METHODOLOGY OVERVIEW

The JMMI is conducted jointly with KCWG partners. The geographic coverage was determined by the access and capacity of participating partners.

The participating agencies collectively developed and reviewed the data collection tools, and trained their enumerators on the JMMI methodology and data collection tools. Primary data was collected through interviews with vendors (retailers who sell directly to customers) in the targeted marketplaces. Enumerators were asked to record three prices per item in each targeted marketplace. Data was collected through the Open Data Kit (ODK) mobile application and was uploaded to a secure Kobo server for cleaning and analysis.

For each item, the median prices per marketplace were calculated, after which the median of all those locations was calculated to derive the aggregated median prices presented in this factsheet. This methodology is derived to minimize the effects of outliers and differing amounts of data among assessed location. Outliers are reported only where relevant. Non-numeric indicators of categorical values are calculated as proportions (percentages).

REACH performed daily data quality checks with the partners during and after data collection. This process includes checking for duplicate interviews and numerical outliers (particularly item prices). Data was analysed at county level using R statistical software. All findings are indicative and only apply to the period within which data was collected. Moreover, item specifications may vary slightly between locations according to the different brands available, and comparability between the locations assessed is limited.

LIMITATIONS

For some questions, vendors were asked to recall events over a 3 month period. This is a long period of time, which might impact the accuracy of answers.

Unable to update the MEB values for more counties to inform programming due to the decreased coverage. Fewer partners participated in the data collection round compared to the previous round of Q4 2022.

The methodology specifies that three prices are collected per commodity, per market. For this round of data collection, there were less than three prices collected per commodity per market for some commodities.

The JMMI data collection tool requests the cheapest available type of each item to be recorded, as availability varies across regions. Therefore price comparisons across counties may be based on slightly varying products.

About the Kenya Cash Working Group

The KCWG is a multi-agency, inter-cluster technical working group set up to ensure that CVA in Kenya is coordinated, harmonised, and context specific, and is undertaken in a manner that does not inflict harm or exacerbate vulnerabilities of the affected population. The working group was established to provide an enabling environment for collective learning, operational and technical collaboration. The KCWG sought technical support from Cash Cap to undertake the required steps toward reviewing the interim MEB guidance document and additionally, develop a common reference point for both national and international actors for the harmonization of MPCA across the country. The KCWG is currently co-chaired by the National Drought Management Authority (NDMA) and Kenya Red Cross (KRCS), and the MEB work stream is co-chaired by the World Food Programme (WFP) and REACH Initiative.

ENDNOTES

[1] The Minimum Expenditure Basked (MEB) is defined as what a household requires to meet basic needs on a regular or seasonal basis - and its average cost.

[2] National Drought Early Warning Bulletin by NDMA, May 2023

[3] Retail Petroleum Prices by Enery and Petroleum Regulatory Authority, April 2023.

[4] The JMMI in Kenya is conducted every quarter of the year with the first (Q1) being done in March, the second (Q2) in June, the third (Q3) in September and the fourth (Q4) in December.

[5] USD-131.6 KES in April 2023.

[6] Vendors could select multiple responses hence the percentages may add up to more than 100%.

[7] 30 day Public Curfew Order for Turkana, Elgeyo Marakwet, Baringo, West Pokot, Samburu and Laikipia Counties, February 2023

[8] Market functionality score consists of a collection of indicators, drawn from a single vendor-focused assessment for ease of analysis, that capture data on the five different dimensions of market functionality. The markets are categorized into "full functionality", "reduced functionality", "limited functionality", or "poor functionality" based on the MFS score.

PARTICIPATING PARTNERS, January-March 2023

In Q1 2023, 5 different organizations participated in the JMMI to collect market data. Participating organizations trained their enumerators on the JMMI methodology and data collection tools to collect the data. REACH was responsible for data processing and developing the outputs.