

Libya Joint Market Monitoring Initiative (JMMI)

1 - 24 November 2022 | 1- 14 December 2022

Libya Cash Working Group

REACH Informing more effective humanitarian action

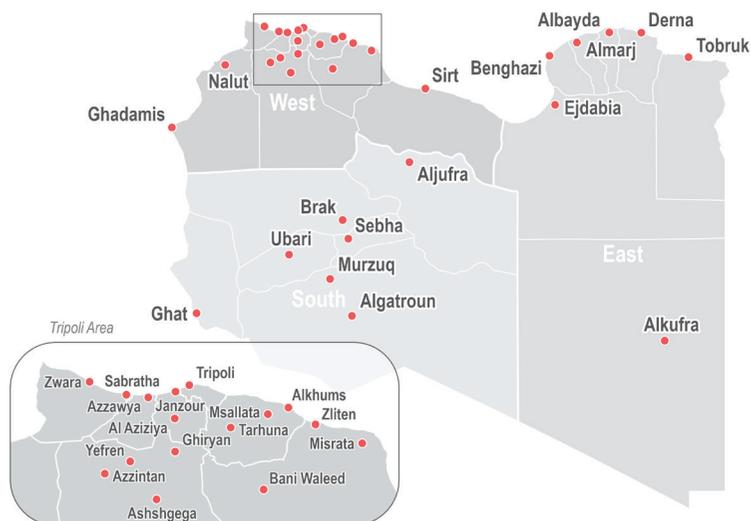
INTRODUCTION

- In an effort to inform cash-based interventions and better understand market dynamics in Libya, the Joint Market Monitoring Initiative (JMMI) was created by the Libya Cash & Markets Working Group (CMWG) in June 2017. The initiative is led by REACH and supported by the CMWG members. It is funded by the Office of U.S. Bureau of Humanitarian Assistance (BHA) and the United Nations High Commissioner for Refugees (UNHCR).
- Markets in key urban areas across Libya are assessed on a monthly basis. In each location, field teams record prices and availability of basic food and non-food items (NFIs) sold in local shops and markets. This factsheet presents an overview of price ranges and medians for key food items and NFIs in the assessed areas, as well as the costs associated with key elements of the Minimum Expenditure Basket (MEB).

METHODOLOGY

- Field staff familiar with the local market conditions identified shops representative of the general price level in their respective locations.
- At least **four** prices per assessed item were collected within each location. In line with the purpose of the JMMI, only the price of the cheapest available brand was recorded for each item.
- Enumerators were trained on methodology and tools by REACH. Data collection was conducted through the KoBoCollect mobile application.
- Following data collection, REACH compiled and cleaned all partner data, normalised prices, cross-checked outliers and calculated the median cost of the MEB in each assessed market. Qualitative information was also gathered from both local sources and economic experts through key informant (KI) interviews.
- More details are available in the Methodology section of the Appendix.

COVERAGE IN DECEMBER 2022



JMMI KEY FINDINGS NOVEMBER 2022

- The cost of the MEB across Libya increased overall by **+1.2%** between October and November 2022 (See page 8). The overall increase of the cost of the MEB in November 2022 was mainly driven by the increase in the cost of the food proportion of the MEB (+1.1%) and hygiene proportion of the MEB (+2.4%). The cost of the MEB in November 2022 was +48.9% higher than pre-COVID-19 levels in March 2020.
- Between October and November 2022, the increase in price of the food proportion of the overall MEB was mainly driven by an increase in price of green tea (+32.5%), peppers (+15.6%), and salt (+12.0%). Other food items showed a decrease in price, such as chicken (-5.9%) and vegetable oil (-5.3%) (See page 4).
- In the same period, the cost of the hygiene portion of the MEB showed a monthly increase (+2.4%) and shifted from a value of 83.98 LYD in October to a value of 86.03 LYD in November 2022. That was mainly driven by the increase in price of shampoo (+20.8%), dishwashing liquid (+17.9%) and sanitary pads (+6.1%), balanced out by the decrease in price of baby diapers (-5.2%), hand sanitizer (-5.1%), and laundry detergent (-3.8%).
- Pharmaceutical items generally showed an increase in price, such as vitamin B (+11.8%), ibuprofen (+10.2%), amoxicillin (+8.4%) and metoclopramide (+3.4%) (See page 4).
- The cost of the fuel proportion of the overall MEB showed no monthly change (0.0%). The price of the cooking fuel component of MEB was 20.00 LYD in both October and November 2022.

JMMI KEY FINDINGS DECEMBER 2022

- The cost of the MEB across Libya increased overall by **+1.9%** between November and December 2022 (See page 8). The overall increase of the cost of the MEB in December 2022 was mainly driven by the increase in the cost of food proportion of the MEB (+1.6%) and fuel proportion of the MEB (+25.0%) balanced out by the decrease in price of the hygiene proportion of the MEB (-1.4%). The cost of the MEB in December 2022 was +51.7% higher than pre-COVID-19 levels in March 2020.
- Between November and December 2022, the increase in price of the food proportion of the overall MEB was mainly driven by an increase in price tomatoes (+35.0%), onions (+9.1%), peppers (+8.1%), and eggs (+3.4%). Other food items showed a decrease in price, such as green tea (-15.1%) and potatoes (-14.3%) (See page 4).
- In the same period, the cost of the hygiene portion of the overall MEB decreased by -1.4%. That was mainly driven by the decrease in price of toothbrushes (-10.5%), hand-washing soap (-10.0%), and baby diapers (-2.9%). The cost of the hygiene proportion of the MEB in December 2022 was +40.8% higher than pre-COVID-19 levels in March 2020.
- Pharmaceutical items generally showed an increase in price, such as paracetamol (+8.1%), metoclopramide (+5.7%), ibuprofen (+4.5%), and vitamin B (+2.6%) (See page 4).
- The cost of the cooking fuel portion of the overall MEB increased in December 2022 by +25% from 20.00 LYD in November to 25.00 LYD in December 2022.

JMMI KEY FIGURES

Nov-data collection from 1 - 24 November 2022

3 participating agencies: (REACH, WFP, DRC)
 40 assessed cities
 56 assessed items
 661 assessed shops

Dec-data collection from 1 - 14 December 2022

3 participating agencies: (REACH, WFP, DRC)
 40 assessed cities
 56 assessed items
 630 assessed shops

KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

Nov-22 **937.47 LYD** ▲ +11.23 LYD ▲ +1.2%

Dec-22 **954.93 LYD** ▲ +17.45 LYD ▲ +1.9%

MEDIAN COST OF MEB BY REGION IN NOVEMBER 2022

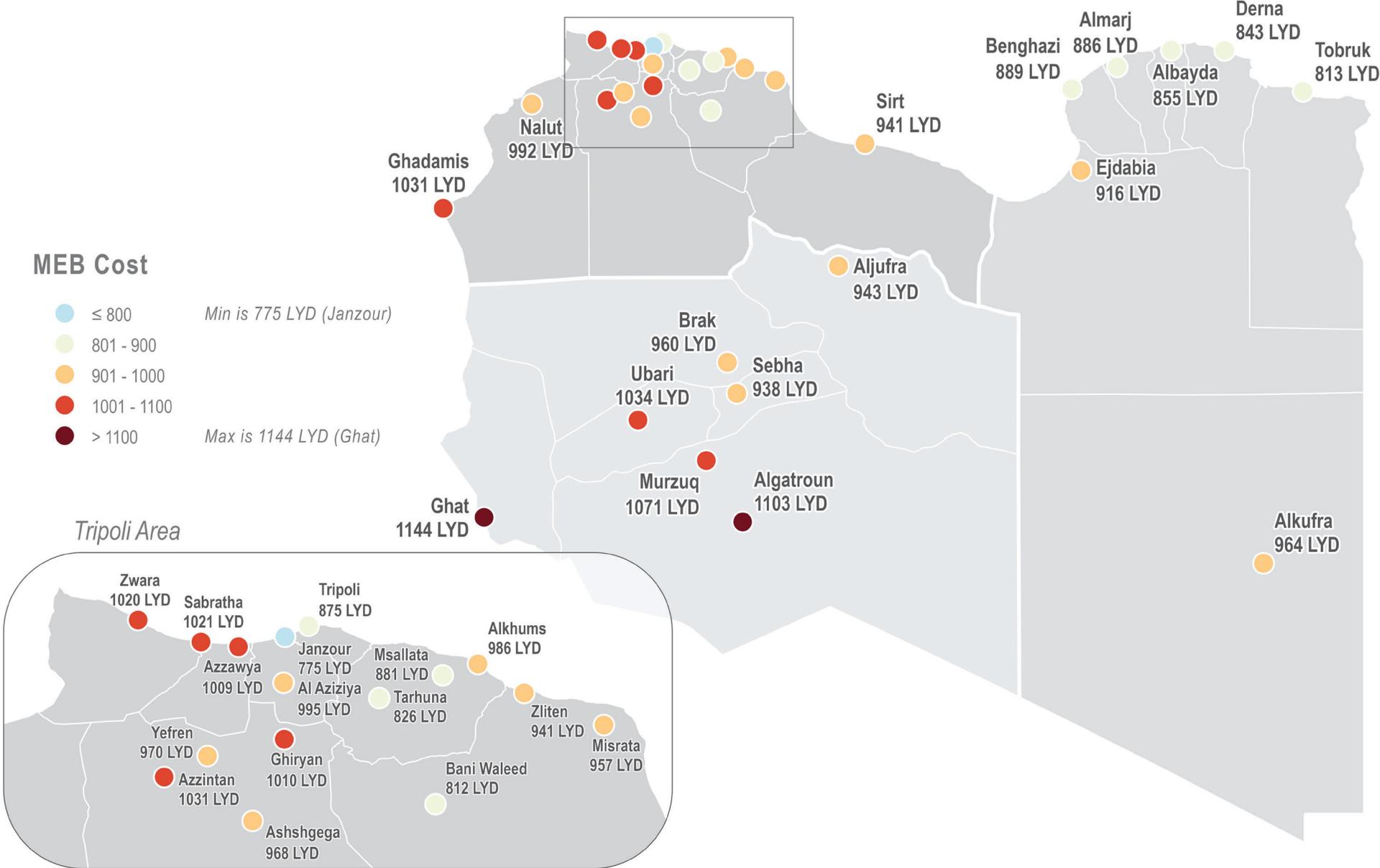
West	946.86 LYD	▲ +2.0%
East	860.04 LYD	▲ +0.8%
South	1066.19 LYD	▲ +9.0%

MEDIAN COST OF MEB BY REGION IN DECEMBER 2022

West	968.38 LYD	▲ +2.3%
East	880.93 LYD	▲ +2.4%
South	1043.96 LYD	▼ -2.1%

Access the JMMI online dashboard

Cost of MEB Key Elements by Location in December 2022



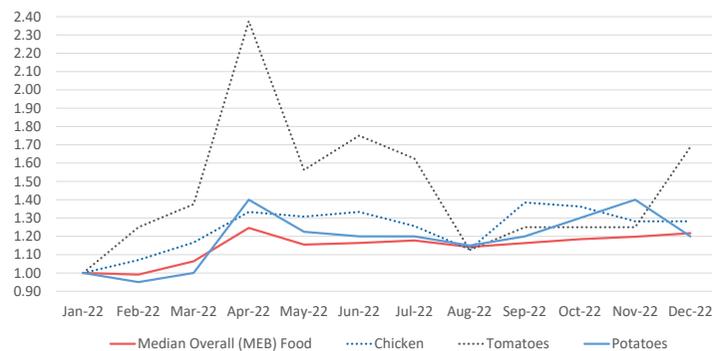
PRICES OF MONITORED ITEMS

Item	Unit	Median price in November 2022 (LYD)	Change between Oct-Nov 2022	Median price in December 2022 (LYD)	Change between Nov-Dec 2022	Change since March 2020*
Food items						
Tomatoes	1 kg	2.50	0.0%	3.38	+35.0%	+68.8%
Green tea	250 g	6.63	+32.5%	5.63	-15.1%	+87.5%
Vegetable oil	1 L	11.63	-5.3%	11.47	-1.4%	+154.9%
Black tea	250 g	6.69	-4.1%	7.00	+4.7%	+40.0%
Onions	1 kg	2.75	+10.0%	3.00	+9.1%	0.0%
Rice	1 kg	4.75	+5.6%	4.82	+1.4%	+48.2%
Eggs	30 eggs	13.50	+4.9%	14.25	+5.6%	+42.5%
Pasta	500 g	3.00	0.0%	2.94	-2.0%	+96.0%
Milk	1 L	4.50	+4.3%	4.50	0.0%	+28.6%
Beans	400 g	2.75	+2.3%	2.94	+6.9%	+80.9%
Bread	5 pieces	1.67	0.0%	1.67	0.0%	+48.4%
Chickpeas	400 g	2.75	+4.8%	2.88	+4.7%	+92.0%
Peppers	1 kg	4.63	+15.6%	5.00	+8.1%	+25.0%
Potatoes	1 kg	3.50	+7.7%	3.00	-14.3%	0.0%
Sugar	1 kg	4.00	0.0%	4.00	0.0%	+68.4%
Tomato paste	400 g	3.98	+6.0%	4.00	+0.6%	+100.0%
Tuna	200 g	6.00	+1.1%	5.97	-0.5%	+99.0%
Condensed Milk	200 mL	2.46	+9.1%	2.50	+1.8%	+25.0%
Couscous	1 kg	6.63	+1.9%	6.75	+1.9%	+92.9%
Lamb meat	1 kg	46.00	0.0%	46.50	+1.1%	+31.0%
Flour	1 kg	3.53	+0.7%	3.61	+2.4%	+80.5%
Chicken meat	1 kg	12.50	-5.9%	12.50	0.0%	+33.3%
Salt	1 kg	1.12	+12.0%	1.00	-10.7%	0.0%
Hygiene items						
Toothbrush	1 brush	3.00	0.0%	2.69	-10.5%	+34.3%
Laundry detergent	1 L	6.38	-3.8%	6.45	+1.2%	+186.7%
Toothpaste	100 mL	6.50	0.0%	6.63	+1.9%	+65.6%
Baby diapers	30	19.69	-5.2%	19.12	-2.9%	+27.5%
Handwashing soap	1 bar	2.50	+2.6%	2.25	-10.0%	+50.0%
Laundry powder	1 kg	7.18	+1.3%	7.04	-1.9%	+8.3%
Sanitary pads	10 pads	4.35	+6.1%	4.30	-1.0%	+22.9%
Shampoo	250 mL	6.34	+20.8%	7.09	+11.8%	+39.6%
Bleach	1 L	10.89	-1.6%	11.22	+3.0%	No data
Hand Sanitiser	1 L	23.25	-5.1%	24.25	+4.3%	No data
Dishwashing liquid	1 L	4.13	+17.9%	4.53	+9.7%	+69.2%
Other items						
Water	1 L	0.29	0.0%	0.29	0.0%	0.0%

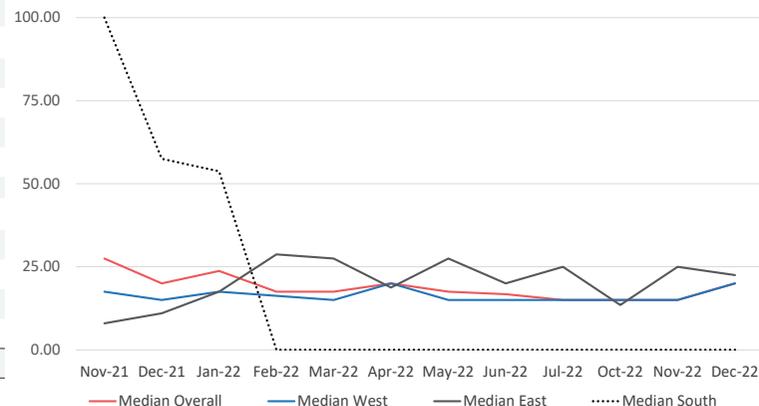
* The change since March 2020 is calculated in comparison to December 2022 values.

FLUCTUATION OF FOOD PRICES OVER TIME

Selected items (normalised, January 2022 = 1.00)¹

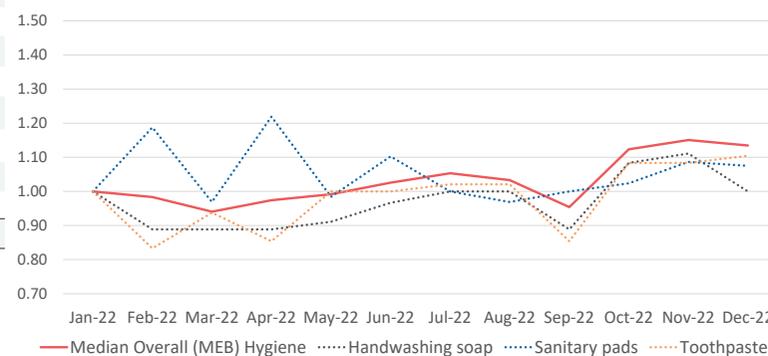


PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LIQUEFIED PETROLEUM GAS (LPG) CYLINDER) (Since January 2022, non-normalised)



FLUCTUATION OF HYGIENE ITEM PRICES OVER TIME

Selected items (normalised, January 2022 = 1.00)²



PRICES OF FUEL AND HEALTH ITEMS

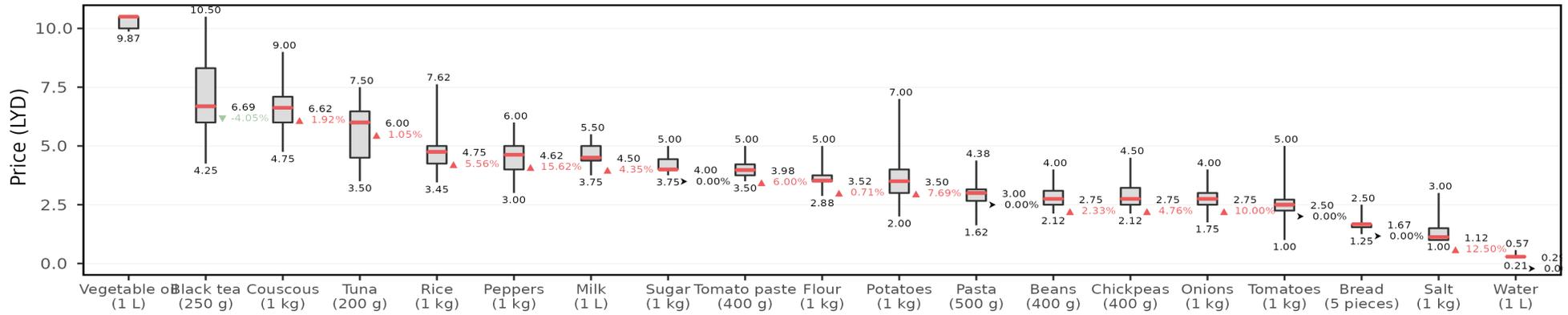
Item	Unit	Median price in November 2022 (LYD)	Change between Oct-Nov 2022	Median price in December 2022 (LYD)	Change between Nov-Dec 2022
Fuel items					
Unofficial LPG	11 kg	15.00	0.0%	20.00	+33.3%
Unofficial Gasoline	1 Litre	0.50	-33.3%	0.75	+50.0%
Official LPG	11 kg	5.00	0.0%	5.00	0.0%
Official Gasoline	1 Litre	0.15	0.0%	0.15	0.0%
Pharmaceutical items					
Paracetamol	400mg [20 pack]	6.94	-17.1%	7.50	+8.1%
Vitamin B	[40 pack]	19.00	+11.8%	19.50	+2.6%
Amoxicillin	500mg [21 pack]	11.25	+8.4%	11.25	0.0%
Metoclopramide	10mg [40 pack]	15.14	+3.4%	16.00	+5.7%
Ibuprofen	400mg [20 pack]	6.89	+10.2%	7.20	+4.5%

NOTABLE MONTH-ON-MONTH CHANGES

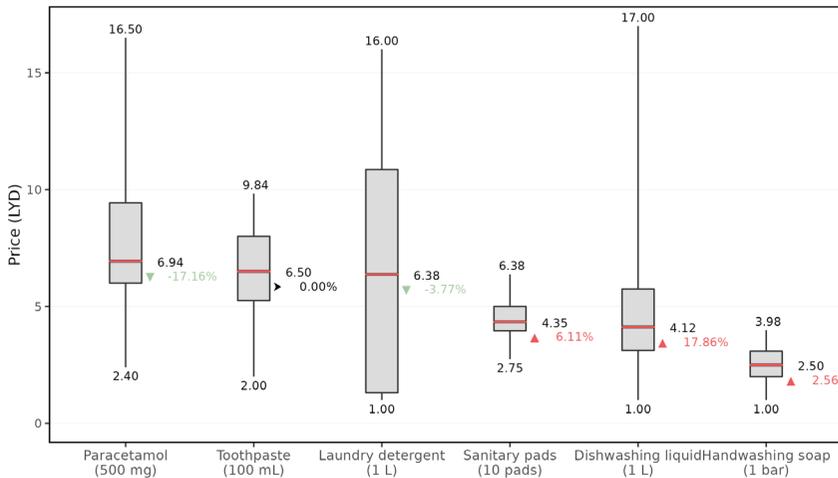
November 2022	Unofficial gasoline	▼ -25.5%
	Green tea	▲ +32.5%
	Shampoo	▲ +20.8%
	Dishwashing liquid	▲ +17.9%
December 2022	Unofficial gasoline	▲ +50.0%
	Unofficial LPG	▲ +33.3%
	LPG	▲ +25.0%
	Green tea	▼ -15.0%

Distribution of Prices in Libya in November 2022

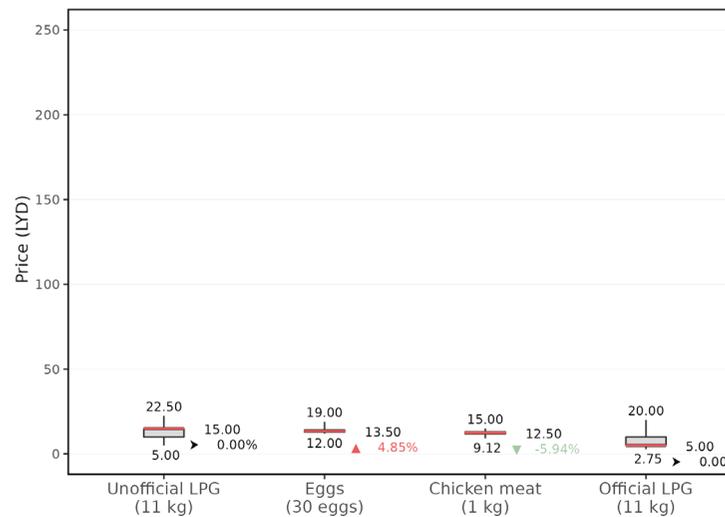
FOOD ITEMS



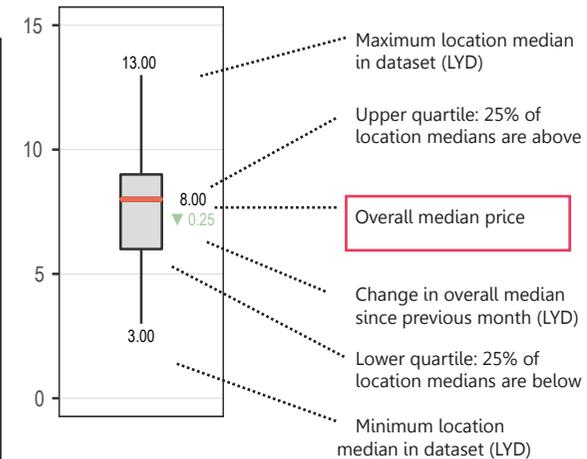
HYGIENE AND HEALTH ITEMS



ITEMS WITH HIGHEST PRICES



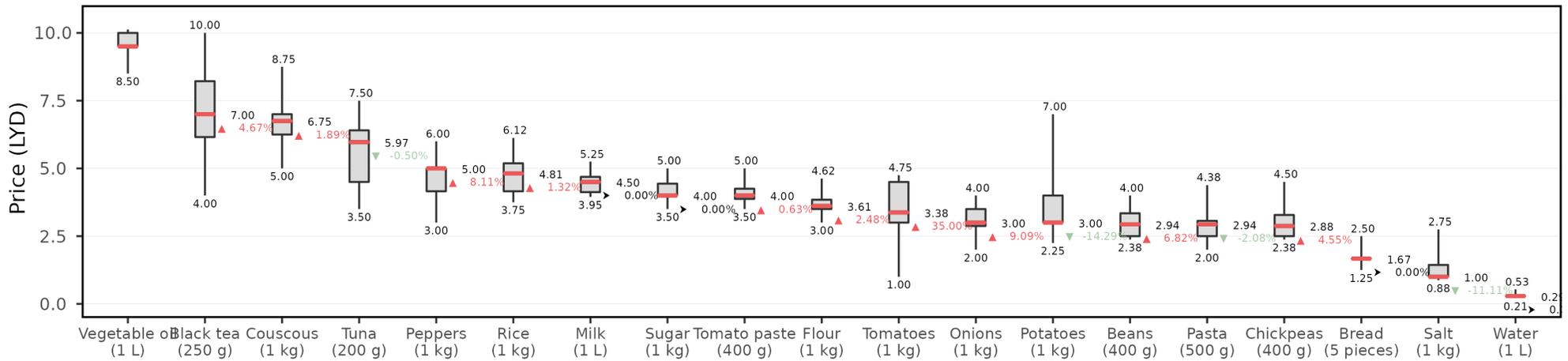
How to read a boxplot



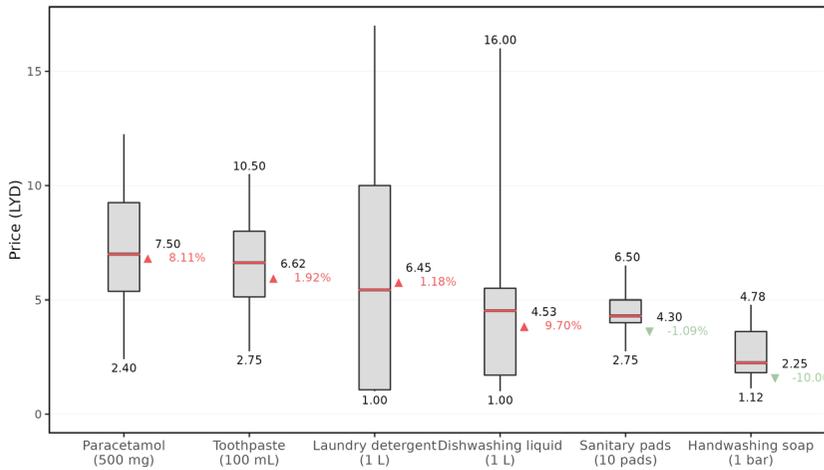
The 'location median' is calculated by first finding the median price of a given item in each assessed location, then taking the median of the resulting set of median prices.

Distribution of Prices in Libya in December 2022

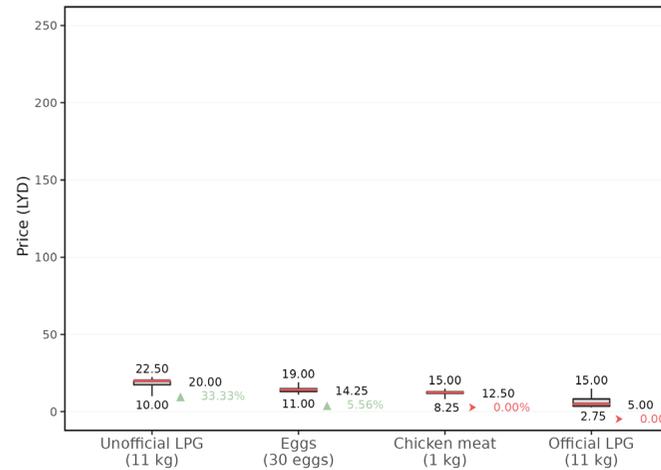
FOOD ITEMS



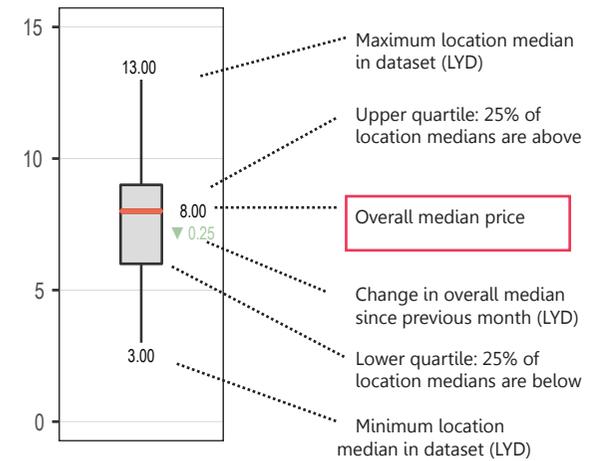
HYGIENE AND HEALTH ITEMS



ITEMS WITH HIGHEST PRICES



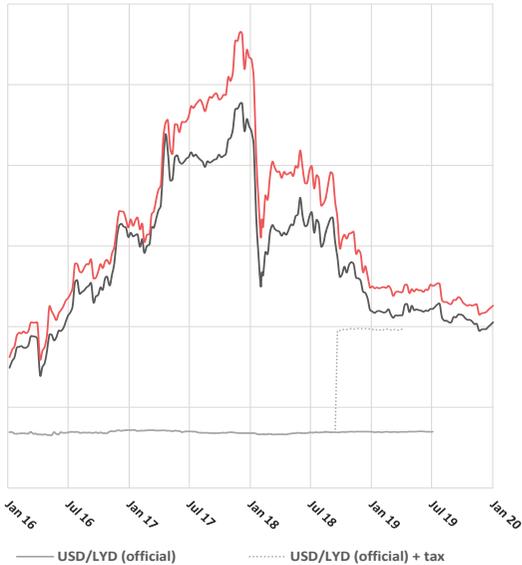
How to read a boxplot



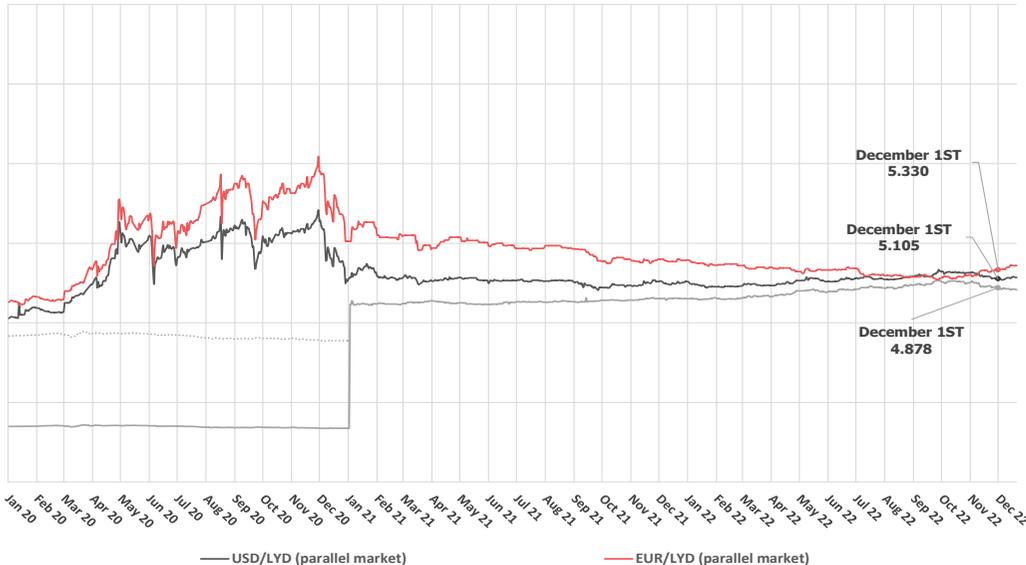
The 'location median' is calculated by first finding the median price of a given item in each assessed location, then taking the median of the resulting set of median prices.

EXCHANGE RATES OVER TIME³

January 2016-January 2020



Since March 2020



EXCHANGE RATES

NOVEMBER 2022

5.012
USD/LYD
official
▼ -0.3%

5.260
USD/LYD
parallel market
▼ -0.4%

5.210
EUR/LYD
parallel market
▲ +1.6%

DECEMBER 2022

4.878
USD/LYD
official
▼ -2.7%

5.105
USD/LYD
parallel market
▼ -2.9%

5.330
EUR/LYD
parallel market
▲ +2.3%

MEDIAN MEB COST BY LOCATION

MINIMUM EXPENDITURE BASKET (MEB)

Key Elements: Food Items

Bread	32 kg	Tomatoes	10 kg
Rice	10.5 kg	Potatoes	12 kg
Pasta	9.5 kg	Onions	7 kg
Couscous	5.5 kg	Peppers	4.5 kg
Beans	6 kg	Tomato paste	6 kg
Chicken	7.5 kg	Black tea	2 kg
Tuna	4 kg	Vegetable oil	5 L
Eggs	4 kg	Sugar	2 kg

Key Elements: Non-Food Items

Bathing soap	1.4 kg (9 150-g bars)
Toothpaste	0.5 kg (5 100-g tubes)
Laundry detergent	1.3 L
Dishwashing liquid	1.3 L
Sanitary pads	4 packs of 10
Cooking fuel (LPG)	22 kg (2 11-kg refills)

Optional Elements

Water (drinking use only)	458 L
Median rent for 3-rm flat	1 month

The Minimum Expenditure Basket (MEB) represents the minimum culturally adjusted group of items required to support a five-person Libyan household (HH) for one month. The cost of the MEB can be used as a proxy for the financial burdens facing households in different locations. The MEB's contents were defined by the CMWG in consultation with relevant sector leads.

Only the MEB's key elements (food and non-food items) were incorporated into the calculations in this factsheet.

Location	Cost of MEB November 2022 (LYD)	Change between Oct-Nov 2022	Cost of MEB December 2022 (LYD)	Change between Nov-Dec 2022	Change since March 2020 (compared to December 2022)
Nalut	949.63	+2.5%	991.65	+4.4%	+35.5%
Azzintan	995.51	0.0%	1030.56	+3.5%	+51.5%
Ghiryan	984.60	+1.3%	1010.11	+2.6%	+44.8%
Zwara	982.16	+5.9%	1019.51	+3.8%	+86.3%
Ghadamis	970.09	+5.2%	1030.98	+6.3%	+50.9%
Sabratha	989.81	+7.3%	1020.56	+3.1%	+83.1%
Azzawya	982.54	+9.2%	1008.57	+2.6%	+84.7%
Sirt	971.09	-0.5%	941.34	-3.1%	+55.5%
AlKhums	952.94	+3.5%	985.98	+3.5%	+82.6%
Misrata	955.18	+1.8%	957.32	+0.2%	+70.7%
Al Aziziya	1007.23	+9.2%	994.97	-1.2%	+81.8%
Ashshgega	914.26	+0.2%	968.21	+5.9%	+49.9%
Zliten	900.13	-0.7%	940.51	+4.5%	+52.8%
Yefren	899.23	-2.7%	970.15	+7.9%	+48.0%
Tripoli	885.13	-3.0%	875.11	-1.1%	+33.6%
Msallata	906.77	+4.4%	881.26	-2.8%	+47.8%
Tarhuna	812.67	+1.3%	825.89	+1.6%	+40.3%
Bani Waleed	840.67	+4.7%	812.37	-3.4%	+36.0%
Janzour	724.23	+3.8%	774.85	+7.0%	+30.7%
Median West	946.86	+2.0%	968.38	+2.3%	+55.0%
Benghazi	881.49	+0.4%	888.76	+0.8%	+45.2%
Ejdabia	889.24	+0.7%	916.17	+3.0%	+41.1%
AlMarj	892.79	+0.8%	885.69	-0.8%	+38.5%
AlKufra	961.54	+0.5%	963.54	+0.2%	+47.6%
Tobruk	785.77	-0.6%	812.55	+3.4%	+29.2%
AlBayda	764.22	+4.6%	854.54	+11.8%	+32.4%
Derna	836.94	+1.1%	843.42	+0.8%	+38.6%
Median East	860.04	+0.8%	880.93	+2.4%	+39.8%
Algatroun	1133.90	+9.9%	1103.28	-2.7%	-2.5%
Ghat	1208.08	+8.6%	1144.33	-5.3%	0.0%
Ubari	1032.29	+6.8%	1034.12	+0.2%	-5.2%
Aljufra	964.52	+5.9%	943.09	-2.2%	+22.2%
Brak	955.83	+8.1%	960.04	+0.4%	+31.7%
Sebha	964.07	-0.7%	938.29	-2.7%	+24.2%
Median South	1066.19	+9.0%	1043.96	-2.1%	+18.8%
Median Overall	937.47	+1.2%	954.93	+1.9%	+51.7%

COST OF MEDIAN OVERALL MEB IN NOVEMBER 2022

937.47 LYD

Change since October 2022
▲ + 11.23 LYD (+1.2%)

Change since March 2020
▲ +308.01 LYD (+48.9%)

COST OF MEDIAN OVERALL MEB IN DECEMBER 2022

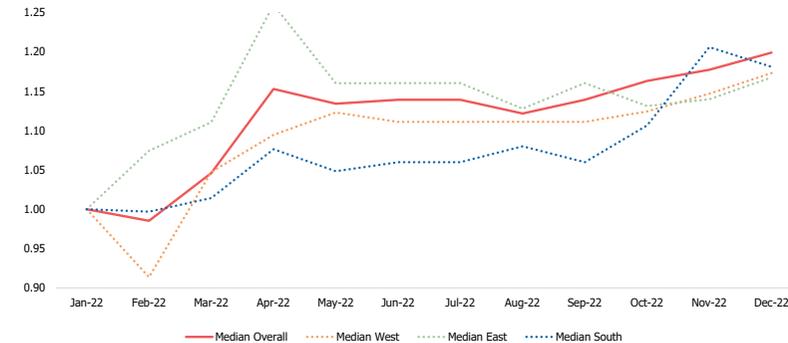
954.93 LYD

Change since November 2022
▲ + 17.45 LYD (+1.9%)

Change since March 2020
▲ + 325.46 LYD (+51.7%)

MEB PRICE INDEX

Since January 2022 (normalised, January 2022 = 1.00)⁴



PREVIOUS JMMI OUTPUTS

Factsheets

Datasets

2022

October
September
August
July
June
May
April
March
February
January

October
September
August
July
June
May
April
March
February
January

2021

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February
January

What is the CMWG?

The Libya Cash & Markets Working Group (CMWG), established in September 2016, is a community of humanitarian actors that support and coordinate cash-based interventions in Libya. The CMWG, based jointly in Tripoli and Tunis, is currently led by UNHCR.

Methodology (cont. from page 1)

The methodology for the JMMI is based on purposive sampling. In each assessed market, at least four prices per item need to be collected from different shops to ensure the quality and consistency of collected data. Partner field teams, in coordination with the CMWG, identify shops to assess based on the following criteria:

1. Shops need to be large enough to sell all or most assessed items.
2. Prices in these shops need to be good indicators of the general price levels in the assessed area.
3. Shops should be located in different areas within the assessed city or baladiya.

In locations where it is not possible to identify four large markets that fulfil criterion (1), smaller shops, such as grocery shops, vegetable vendors, butchers and bakeries, are added to the shop list, as long as they fit criteria (2) and (3), in order to guarantee at least four prices per item of interest. Each month, price data is collected from the same shops whenever possible to ensure comparability across months.

The CMWG primarily targets urban areas throughout Libya, aiming to ensure coverage of markets that serve as commercial hubs for surrounding regions.

Data is collected via the KoBo mobile data collection application. The CMWG maintains a joint KoBo account for the JMMI. The data collection tool is published alongside the dataset every month and disseminated to the humanitarian community.

In addition, in order to obtain a median price for an item in Tripoli, an aggregation of the median prices of that specific item in Abuselim, Ain Zara, Tajoura and Suq Aljumaa is done when Hai Alandalus, Tripoli center and Qasr ben Ghashir are excluded temporarily.

Analyses

The median prices reported in this factsheet are 'location medians', designed to minimise the effects of outliers and differing amounts of data among assessed locations. First, the median prices of all assessed items are calculated within each assessed location (city or muhalla); then, REACH calculates the median of this list of medians. All boxplots, as well as the MEB and price index calculations are created using this method.

The cost of the MEB is calculated by multiplying the median price of each item in the MEB's 'Key Elements' section by the quantity listed in the table on page 6.

In cases where no median price is available for an item in a city then the price from the nearest city is imputed (using google maps). For example, for a city X, if the median cost of salt is missing, imputation happens: In other words, X takes a value of the median price of salt of the closest city geographically.

Challenges and limitations

Price data is only indicative for the time frame within which it was collected. Prices may vary during the weeks between adjacent data collection rounds.

The data is only indicative of the general price levels in each assessed location. Representativeness on the mantika (district) level cannot be claimed. Even on the city level, price data must be interpreted with caution, particularly in larger cities where there is substantial variation in neighbourhoods' socioeconomic levels.

The JMMI data collection tool requires enumerators to record the cheapest available price for each item, but does not require a specific brand, as brand availability may vary. Therefore, price comparisons across regions may be based on slight variants of the same product.

The JMMI does not intend to measure general inflation levels on Libyan markets. As per JMMI methodology, only the cheapest available price per item is collected, meaning that changes in middle-market and upmarket goods are not captured.

Endnotes

¹ The food prices were normalised by setting January 2022 as the baseline and dividing each month's price by the price in January 2022.

² The hygiene prices were normalised by setting January 2022 as the baseline and dividing each month's price by the price in January 2022.

³ Official rate: Central Bank of Libya (1 January 2021). Parallel market rates: Ewan Libya (1 January 2021). Both the official and the parallel market rates from January 2021 were used for the calculation of the monthly changes (<https://cbl.gov.ly/en/>).

⁴ The MEB price index was normalised by setting January 2022 as the baseline and dividing each month's price by the price in January 2022).

REACH is a leading humanitarian information provider that uses primary data collection and in-depth analysis as tools to enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development settings.

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