Joint Market Monitoring Initiative (JMMI)

12th February 18th February 2023 Libya

INTRODUCTION

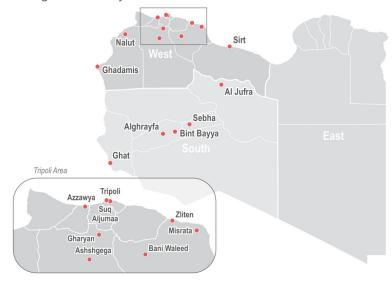
• In an effort to inform cash-based interventions and better understand market dynamics in Libya, the Joint Market Monitoring Initiative (JMMI) was created by the Libya Cash & Markets Working Group (CMWG) in June 2017. The initiative is led by REACH and supported by the CMWG members. It is funded by 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, crosschecked outliers and calculated the median cost of the MEB in each assessed market.
- More details are available in the Methodology section of the Appendix.

Map 1: Coverage in February 2023*



^{*} Exceptionally no data was collected in the east region in February 2023 JMMI round.

JMMI KEY FINDINGS

- The cost of the MEB across Libya increased overall (+2.9%) between January and February 2023. The cost of the hygiene proportion of the MEB increased by 13.7%, while the food proportion of the MEB increased slightly by 1.7%. At the same time, the fuel proportion of the MEB remained the same overall (0.0%) with a value of 32.5 LYD. The cost of the fuel proportion of the MEB showed a decrease in the west (-19.2%) while it showed an increase in the south (+2.0%). Furthermore, the cost of the February 2023 MEB was 54.8% higher than pre-COVID-19 levels in March 2020.
- The monthly increase in the price of the food proportion of the overall MEB was mainly driven by the increase in price of tomatoes (+12.5%), peppers (+11.1%), and black tea (+8.9%). Other food items showed a decrease in price, such as chicken (-4.9%), condensed milk (-4.9%) milk (-2.9%), and eggs (-1.7%) (See page 2).
- The monthly increase of +13.7% of the hygiene component of the MEB from 95.71 LYD to 108.83 LYD was mainly driven by the increase in price of dish-washing liquid (+64.8%), laundry detergent (+17.5%), toothpaste (+14.0%), hand-washing soap (+11.3%) and hand sanitiser (+7.8%), balanced out by the decrease in price of toothbrushes (-13.0%), sanitary pads (-4.0%) and baby diapers (-1.1%). The cost of the hygiene portion of the MEB in February 2023 was 80.6% higher than pre-COVID-19 levels in March 2020.
- Some pharmaceutical items showed a decrease in price, such as ibuprofen (-12.4%) and metoclopramide (-3.4%), while other items showed no change in price (0.0%), such as vitamin B and amoxicillin or an increase in price such as metoclopramide (+8.3%) (See page 2).

JMMI KEY FIGURES

February 2023 data collection from The 12th February to the 18th February 2023

1 participating agency (REACH Initiative)

17 assessed cities56 assessed items267 assessed shops

KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

Feb-23 974.13 LYD + 27.09 LYD +2.9%

MEDIAN COST OF MEB BY REGION IN FEBRUARY 2023

West 967.30 LYD +1.5%
East No data No data
South 956.72 LYD 0.0%

MARKET SHORTAGES

None reported

Reported changes are month-on-month

Access the JMMI online dashboard

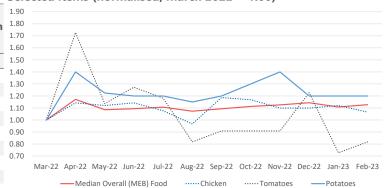


PRICES OF MONITORED ITEMS

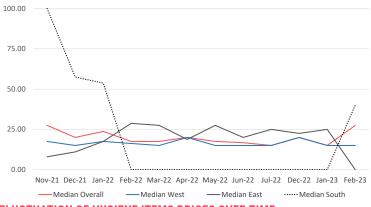
Item	Unit	Median price (LYD)	Change since January 2023	Change since March 2020
Food items				
Tomatoes	1 kg	2.25	+12.5%	+12.5%
Green tea	250 g	6.25	-2.0%	+108.3%
Vegetable oil	11	10.30	0.0%	+128.8%
Black tea	250 g	7.63	+8.9%	+52.5%
Onions	1 kg	3.00	0.0%	0.0%
Rice	1 kg	4.50	+5.9%	+38.5%
Eggs	30 eggs	14.75	-1.7%	+47.5%
Pasta	500 g	2.97	+1.0%	+98.0%
Milk	11	4.13	-2.9%	+17.9%
Beans	400 g	3.00	+4.3%	+84.6%
Bread	5 pieces	1.67	0.0%	+48.4%
Chickpeas	400 g	2.63	0.0%	+75.0%
Peppers	1 kg	5.00	+11.1%	+25.0%
Potatoes	1 kg	3.00	0.0%	0.0%
Sugar	1 kg	4.00	0.0%	+68.4%
Tomato paste	400 g	4.00	0.0%	+100.0%
Tuna	200 g	6.19	+5.0%	+106.2%
Condensed milk	200 ml	2.80	-4.9%	+39.8%
Couscous	1 kg	7.00	0.0%	+100.0%
Lamb meat	1 kg	55.00	+2.8%	+54.9%
Flour	1 kg	3.50	+2.9%	+75.0%
Chicken meat	1 kg	12.13	-4.9%	+29.3%
Salt	1 kg	1.00	0.0%	0.0%
Hygiene items				
Toothbrush	1 brush	2.50	-13.0%	+25.0%
Laundry detergent	11	12.59	+17.5%	+459.3%
Toothpaste	100 ml	7.13	+14.0%	+78.1%
Baby diapers	30	19.89	-1.1%	+32.6%
Handwashing soap	1 bar	3.46	+11.3%	+130.3%
Laundry powder	1 kg	8.33	0.0%	+28.2%
Sanitary pads	10 pads	4.00	-4.0%	14.3%
Shampoo	250 ml	6.25	+4.2%	+23.2%
Bleach	11	11.56	+6.6%	No data
Hand Sanitiser	11	31.25	+7.8%	No data
Dishwashing liquid	11	7.50	+64.8%	+180.4%
Other items	1	0.29	0.00/	0.00/
Water	1.1	0.29	0.0%	0.0%

FLUCTUATION OF FOOD ITEM PRICES OVER TIME

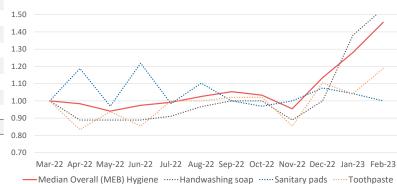
Selected items (normalised, March 2022 = 1.00)¹



PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LIQUEFIED PETROLEUM GAS (LPG) CYLINDER) (Since March 2022, Non-normalized)



FLUCTUATION OF HYGIENE ITEMS PRICES OVER TIME Selected items (normalised, March 2022 = 1.00)²



PRICES OF FUEL AND HEALTH ITEMS

Item	Unit	Median price in February 2023 (LYD)	Change between Jan - Feb 2023	Change since March 2020
Fuel items				
Unofficial LPG	11 kg	27.50	0.0%	-21.4%
Unofficial Gasolin	e 11	1.00	-42.9%	No data
Official LPG	11 kg	5.00	0.0%	0.0%
Official Gasoline	11	0.15	0.0%	No data
Pharmaceutical i	tems			
Paracetamol	400 mg [20 pack]	6.50	+8.3%	-6.3%
Vitamin B	[40 tablets pack]	44.00	0.0%	+329.3%
Amoxicillin	500 mg [21 pack]	12.00	0.0%	+33.3%
Metoclopramide	10 mg [40 pack]	16.57	-3.4%	+65.7%
Ibuprofen	400 mg [20 pack]	6.67	-12.4%	+21.3%

NOTABLE MONTH-ON-MONTH CHANGES

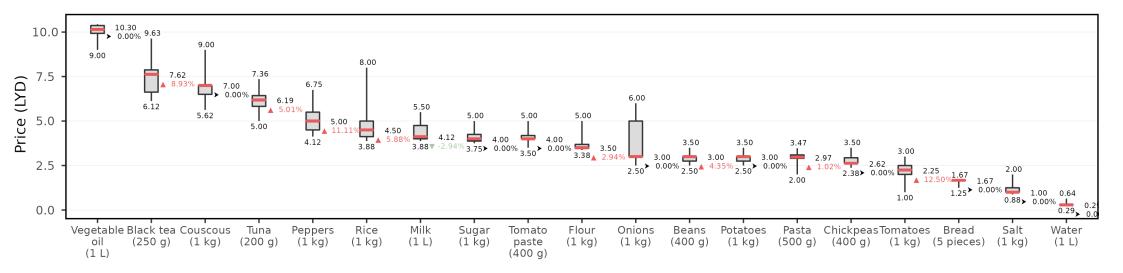
Dishwashing liquid Laundry detergent Unofficial gasoline

▲ +64.8% **▲** +17.5% **▼** -42.9%

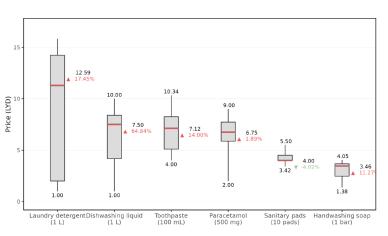


Distribution of Prices in Libya in February 2023

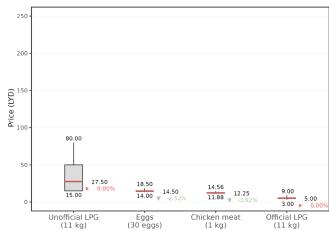
FOOD ITEMS



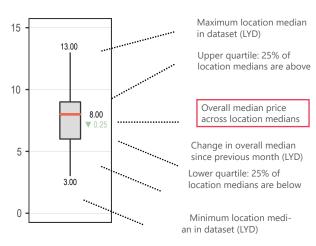
HYGIENE AND HEALTH ITEMS



ITEMS WITH HIGHEST PRICES



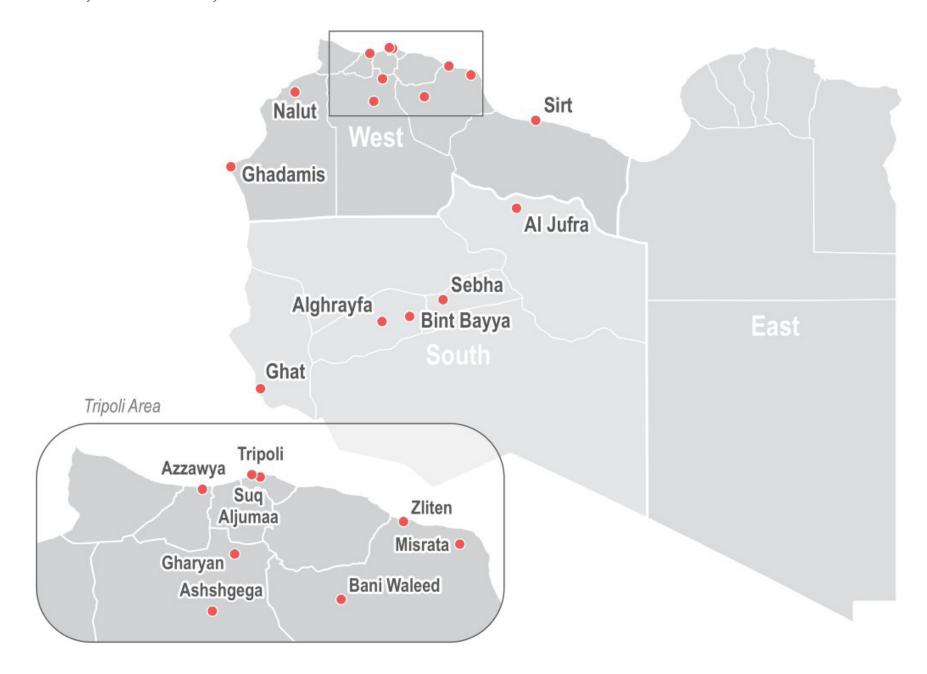
HOW TO READ A BOXPLOT



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.



Map 2: Cost of MEB Key elements in February 2023



MINIMUM EXPENDITURE BASKET

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 I
Eggs	4 kg	Sugar	2 kg
Milk	8.5 l	Salt	1 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.

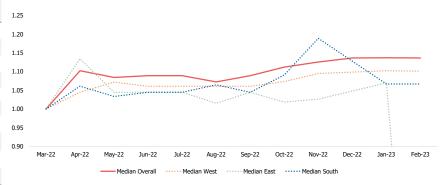
Only the MEB's key elements (food and non-food items) were incorporated into the calculations in this factsheet.

MEDIAN MEB COST BY LOCATION

Location	Cost of MEB February 2023 (LYD)	Change between Jan-Feb 2023	Change since March 2020 (com- pared to February 2023)
Nalut	1030.48	+3.1%	+40.8%
Ghiryan	1017.12	2.1%	+45.8%
Ghadamis	986.29	+4.1%	+44.4%
Azzawya	962.89	+0.8%	+76.3%
Sirt	939.06	+6.0%	+55.1%
Misrata	904.98	-2.9%	+61.4%
Ashshgega	1020.95	+8.5%	+58.0%
Zliten	921.90	+1.6%	+48.2%
Tripoli	978.58	+3.0%	+49.4%
Bani Waleed	940.58	+1.2%	+57.5%
Median West	967.30	+1.5%	+54.9%
Al Ghrayfa	976.46	No data	No data
Bint Bayya	999.93	+8.5%	No data
Ghat	1087.18	-3.8%	-5.0%
Aljufra	875.94	+0.3%	+13.5%
Sebha	1005.77	No data	+33.1%
Median South	956.72	0.0%	+8.8%
Median Overall	974.13	+2.9%	+54.8%

MEB PRICE INDEX

Since March 2022 (normalised, March 2022 = 1.00)*



COST OF MEDIAN OVERALL MEB IN FEBRUARY 2023

974.13 LYD

Change since
January 2023

▲ +27.09 LYD
(+2.9%)

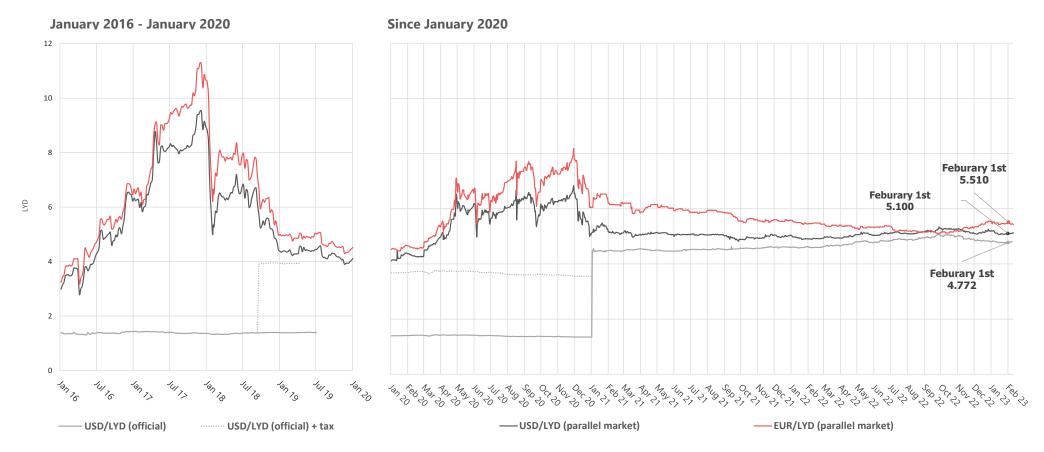
Change since
March 2020

▲ +344.66 LYD
(+54.8%)

^{*} No data was collected exceptionally in the east region in the February 2023 JMMI round.



EXCHANGE RATES OVER TIME



EXCHANGE RATES

4.772 USD/LYD official ▼-0.7%

5.100 USD/LYD parallel market ▼-2.0% 5.510 EUR/LYD parallel market ▼-0.4%



MARKET MONITORING INITIATIVE: FEBRUARY 2023 | LIBYA

PREVIOUS JMMI OUTPUTS

Datasets

Factsheets

2023

January January

2022

December December November November October October September September August August July July June June May May April April March March February February January January

2021

December December November November October October September September August August July July June June May May April April March March February February January January

2020

December December November November October October September September August August July July June June May May April April March March February February January January

2019

December December November November October October September September July July Juńe June May May April April March March February February January 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 cashbased 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 Sug 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.

Finally, significant price changes and unavailability of certain items are further investigated by following up with the respective organization focal point (who in turn consult their field teams). Whenever possible, information about the local context are gathered in order to provide some qualitative analysis.

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

PAGE 2

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

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

ABOUT REACH

REACH Initiative facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research -Operational Satellite Applications Programme (UNITAR-UNOSAT).

