# Joint Market Monitoring Initiative (JMMI) 3<sup>rd</sup> March - 23<sup>rd</sup> March 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 nonfood 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.
- More details are available in the Methodology section of the Appendix.



- 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 an increase in price of onions doubling (+100.0%), tomatoes (+11.1%), green tea (+10.0%), potatoes (+8.3%), chicken (+7.2%) and peppers (5.0%). Other food items showed a decrease in price, such as rice (-5.6%), flour (-3.6%) and pasta (-3.2%) (See page 2).
- The monthly decrease of 4.7% of the hygiene component of the MEB from 108.83 LYD to 103.67 LYD was mainly driven by the decrease in price in dishwashing liquid (-20.0%), hand-washing soap (-11.3%), baby diapers (-6.2%) and bleach (-3.7%). Other items showed no or minor changes of increase in price, such as sanitary pads (0.0%), laundry powder (0.0%) and toothpaste (+1.8%). The cost of the hygiene portion of the MEB in March 2023 was 92.3% higher than pre-COVID-19 levels in March 2020.
- Some pharmaceutical items showed a decrease in price, such as vitamin B (-28.8%) and paracetamol (-5.7%), while other items showed no change in price (0.0%), such amoxicillin and metoclopramide or an increase in price such as ibuprofen (+3.6%) (See page 2).

# **JMMI KEY FIGURES**

# March 2023 data collection from 3<sup>rd</sup> March to the 23<sup>rd</sup> March 2023

**1** participating agency (REACH Initiative)

18 assessed cities56 assessed items425 assessed shops

#### **KEY MONTHLY CHANGES IN MEB**

Median cost of overall MEB

Mar-23 991.21 LYD	+ 17.08 LYD	+1.8%
-------------------	-------------	-------

#### MEDIAN COST OF MEB BY REGION IN FEBRUARY 2023

West	1009.18 LYD	+4.3%
East	883.44 LYD	-1.4%*
South	967.42 LYD	+1.1%

#### **MARKET SHORTAGES**

None reported

Reported changes are month-on-month

#### Access the JMMI online dashboard

\* The monthly change in the east region in March 2023 is, exceptionally, compared to January 2023 MEB value (896.40 LYD).

#### Benghaz Tobruk . Sirt Nalut Ghadamis Al Jufra Sebha Ubari Ghat Al Kufra Tripoli Area Tripoli Azzawya Sug Zliten Aljumaa Misrata • Gharyan • Bani Waleed Ashshgega

#### Libya Cash Working Group



Map 1: Coverage in March 2023

### **PRICES OF MONITORED ITEMS**

ltem	Unit	Median price (LYD)	Change since February 2023	Change since March 2020
Food items				
Tomatoes	1 kg	2.50	+11.1%	+25.0%
Green tea	250 g	6.88	+10.0%	+129.2%
Vege-table oil	11	10.00	-2.9%	+122.2%
Black tea	250 g	7.25	-4.9%	+45.0%
Onions	1 kg	6.00	+100.0%	+100.0%
Rice	1 kg	4.25	-5.6%	+30.8%
Eggs	30 eggs	15.00	+1.7%	+50.0%
Pasta	500 g	2.88	-3.2%	+91.7%
Milk	11	4.25	+3.0%	+21.4%
Beans	400 g	2.88	-4.2%	+76.9%
Bread	5 pieces	1.67	0.0%	+48.4%
Chickpeas	400 g	2.50	-4.8%	+66.7%
Peppers	1 kg	5.25	+5.0%	+31.3%
Potatoes	1 kg	3.25	+8.3%	+8.3%
Sugar	1 kg	4.00	0.0%	+68.4%
Tomato paste	400 g	4.00	0.0%	+100.0%
Tuna	200 g	6.43	+4.0%	+114.3%
Condensed Milk	200 ml	2.75	-1.6%	+37.5%
Couscous	1 kg	7.00	0.0%	+100.0%
Lamb meat	1 kg	55.50	+0.9%	+56.3%
Flour	1 kg	3.38	-3.6%	+68.8%
Chicken meat	1 kg	13.00	+7.2%	+38.7%
Salt	1 kg	1.00	0.0%	0.0%
Hygiene items				
Toothbrush	1 brush	2.50	0.0%	+25.0%
Laundry detergent	1 L	12.34	-2.0%	+448.2%
Toothpaste	100 ml	7.25	+1.8%	+81.3%
Baby diapers	30	18.65	-6.2%	+24.3%
Handwashing soap	1 bar	3.07	-11.3%	+104.3%
Laundry powder	1 kg	8.33	0.0%	+28.2%
Sanitary pads	10 pads	4.00	0.0%	+14.3%
Shampoo	250 ml	6.13	-2.0%	+20.7%
Bleach	11	11.13	-3.7%	No data
Hand Sanitiser	11	31.25	0.0%	No data
Dishwashing liquid	11	6.00	-20.0%	+124.3%
Other items				
Water	11	0.29	0.0%	0.0%

### PRICES OF FUEL AND HEALTH ITEMS

Unit	Median price in March 2023 (LYD)	Change between Feb - Mar 2023	Change since March 2020
11 kg	19.38	-29.5%	-44.6%
1	1.50	+50.0%	No data
11 kg	5.00	0.0%	0.0%
1	0.15	0.0%	No data
400mg [20 pack]	6.13	-5.7%	-11.7%
[40 pack]	31.34	-28.8%	+205.8%
500mg [21 pack]	12.00	0.0%	+33.3%
10mg [40 pack]	16.57	0.0%	+65.7%
400mg [20 pack]	6.91	+3.6%	+25.6%
	11 kg 1 l 1 kg 1 l 1 kg 1 l 1 kg 1 l 1 kg 1 l 2 kg 1 kg 1 kg 1 kg 1 kg 1 kg 1 kg 1 kg 1	Onte In March 2023 (LYD)   In March 2023 (LYD) In March 2023 (LYD)   11 kg 19.38   11 kg 19.38   11 kg 5.00   11 kg 5.00   11 kg 0.15   11 kg 6.13   400mg [20 pack] 6.13   [40 pack] 31.34   500mg [21 pack] 12.00   10mg [40 pack] 16.57	Ontr in March 2023 between Feb - Mar 2023   In March 2023 between Feb - Mar 2023   In March 2023 between Feb - Mar 2023   11 kg 19.38   11 kg 19.38   11 kg 1.50   11 kg 5.00   11 kg 0.15   11 kg 0.15   11 kg 0.0%   11 kg 0.15   10 kg 5.00   11 kg 0.15   10 kg 0.0%   11 kg 0.15   10 kg 0.0%   11 kg 1.34   -28.8% 0.0%   10 kg 12.00   10 kg 0.0%

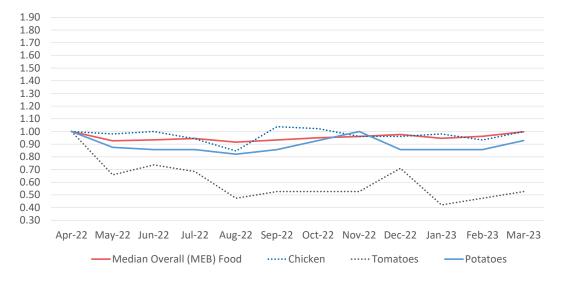
### **NOTABLE MONTH-ON-MONTH CHANGES**

Onions	<b>▲</b> +100.0%
Green tea	<b>▲</b> +10.0%
Dishwashing liquid	▼ -20.0%



### FLUCTUATION OF FOOD ITEM PRICES OVER TIME

### Selected items (normalised, April 2022 = 1.00)<sup>1</sup>

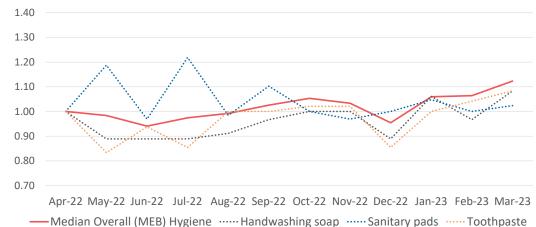


### PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LIQUEFIED Petroleum Gas (LPG) Cylinder)

# (Since April 2022, Non-normalized) 75.00 50.00 50.00 25.00 0.00 Apr-22 May-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Median Overall — Median West — Median East — Median South

### FLUCTUATION OF HYGIENE ITEMS PRICES OVER TIME

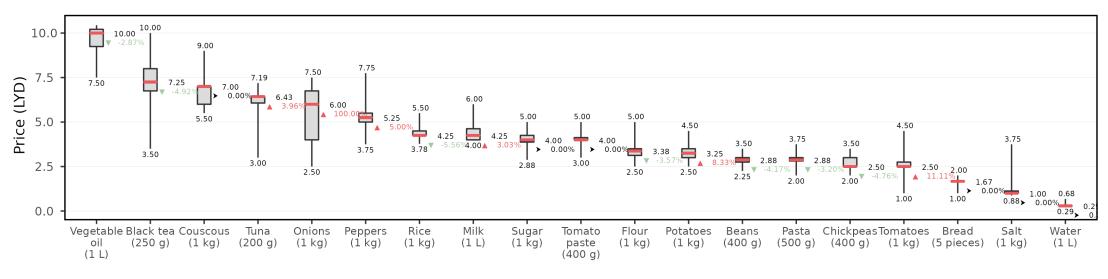
Selected items (normalised, April 2022 = 1.00)<sup>2</sup>





# **Distribution of Prices in Libya in March 2023**

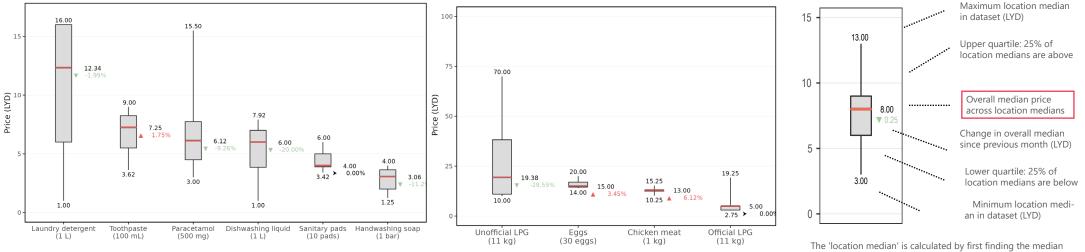
### **FOOD ITEMS**



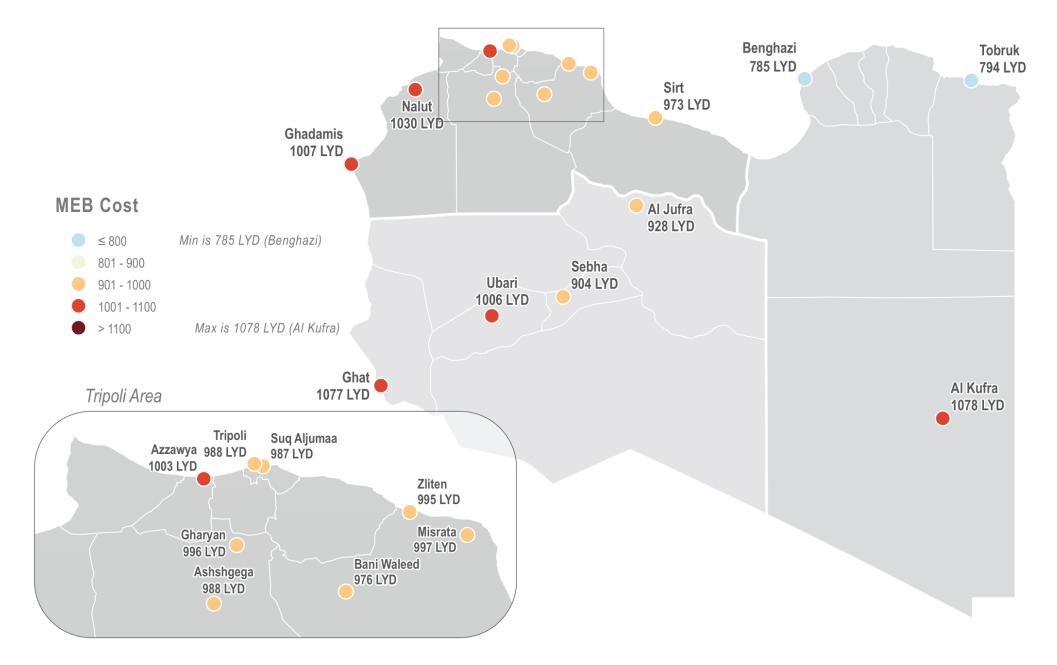
**HYGIENE AND HEALTH ITEMS** 

### **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 March 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 I	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
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 I 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 fiveperson 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.

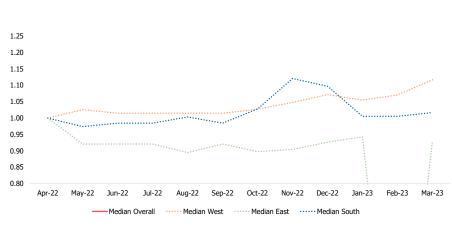
Only the MEB's key elements (food and non-food items) were incorporated into the calculations in this factsheet.

## **MEDIAN MEB COST BY LOCATION**

Location	Cost of MEB March 2023(LYD)	Change between Feb-Mar 2023	Change since March 2020 (compared to March 2023)
Nalut	1030.15	0.0%	+40.7%
Ghiryan	996.01	-2.1%	+42.8%
Ghadamis	1007.48	+2.1%	+47.5%
Azzawya	1002.83	+4.1%	+83.7%
Sirt	973.44	+3.7%	+60.8%
Misrata	996.92	+10.2%	+77.8%
Ashshgega	983.31	-3.7%	+52.2%
Zliten	994.61	+7.9%	+61.6%
Tripoli	988.49	+1.0%	+50.9%
Bani Waleed	976.31	+3.8%	+63.5%
Median West	1009.18	+4.3%	+61.6%
Benghazi	785.09	No data	+28.3%
Al Kufra	1077.78	No data	+65.1%
Tobruk	793.64	No data	+26.2%
Median East	883.44	<b>-1.4</b> %*	+40.2%
Ghat	1077.33	-0.9%	-5.9%
Sebha	903.8	-10.1%	+19.6%
Ubari	1006.35	No data	-7.8%
Aljufra	928.49	+6.0%	+20.3%
Median South	967.42	-8.4%	+8.8%
Median Overall	991.21	+1.8%	+57.5%

### **MEB PRICE INDEX**

Since April 2022 (normalised, April 2022 = 1.00)\*\*



### **COST OF MEDIAN OVERALL MEB IN MARCH 2023**

991.21	LYD
nge since	Change since
arv 2023	March 2020

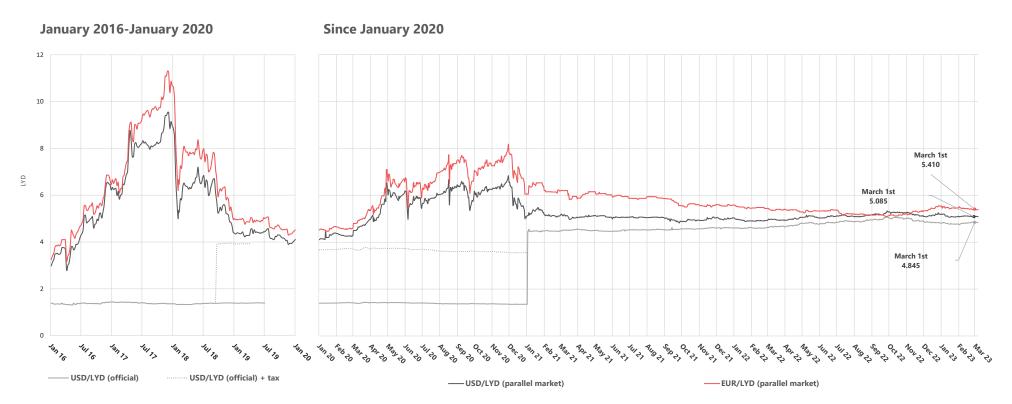
January 2023 ▲ +17.08 LYD ▲ +361.75 LYD (+1.8%) (+57.5%)

Char

\* The monthly change in the east region in March 2023 is, exceptionally, compared to January 2023 MEB value (896.40 LYD).

\*\* The drop in the median in the east were due to no data collection in the east in February 2023.

# **EXCHANGE RATES OVER TIME**



### **EXCHANGE RATES**

**4.845 USD/LYD** official +1.5% 5.100 USD/LYD parallel market 0.0% 5.410 EUR/LYD parallel market ▼-1.3%

#### MARKET MONITORING INITIATIVE: March 2023 | LIBYA

#### **PREVIOUS JMMI OUTPUTS**

#### **Factsheets Datasets** 2023 February February January January

December

November

September

October

August

July

June

May

April

March

February

December

November

September

October

August

July

June

May

April

March

February

January

December

November

September

October

August July

June

Mav

April

March

February

January

December

November

September

October

July

June May

April

March February

January

January

#### 2022

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

#### 2021

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

#### 2020

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

#### 2019

December	
November	
October	
September	
July	
June	
May	
April	
March	
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 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 Libvan 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 3

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

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

