# **Joint Market Monitoring Initiative (JMMI)**

4th May - 14th May 2023 | Libya

# INTRODUCTION

- In an effort to inform cash-based interventions and better understand market dynamics in Libya, the Joint Market representative of the general price level Monitoring Initiative (JMMI) was created by the Libya Cash & Markets Working Group (CMWG) in June 2017. The initiative were collected within each location. is led by REACH and supported by the CMWG members. It is funded by the Office only the price of the cheapest available 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).

Map 1: Coverage in May 2023

# **METHODOLOGY**

- · Field staff familiar with the local market conditions identified shops in their respective locations.
- At least **four** prices per assessed item In line with the purpose of the JMMI, 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.

# JMMI KEY FINDINGS

- The cost of the MEB in the west of Libya increased overall (+1.7%) between April and May 2023. The cost of the May 2023 MEB in the west was 56.8% higher than pre-COVID-19 levels in March 2020. However, in the south of Libya, the cost of the MEB decreased (-1.4%). The cost of the May 2023 MEB in the south was of the May 2023 MEB in the south was 10.1% higher than pre-COVID-19 levels in March 2020.
- The cost of the hygiene proportion of the MEB showed a monthly increase in both west (+10.1%) and south (+2.6%). This monthly increase of the hygiene component of the MEB from 107.72 LYD to 118.61 LYD in the west and from 90.18 LYD to 92.50 LYD in the south was mainly driven by the increase in price of the driven by the increase in price of the items such as: hand sanitizer (+61.5%), hand-washing soap (45.4%), dishwashing liquid (+44.8%), toothbrushes (+29.2%) and toothpaste (+5.6%). In the west, the cost of the hygiene portion of the MEB in May 2023 was 130.8% higher than pre-COVID-19 levels in March 2020. However, in the south, the cost of the hygiene portion of the MEB in May 2023 was 61.9% higher than pre-COVID-19 levels in March 2020.
- In the west, the food proportion of the MEB slightly increased by 0.6%. The monthly increased by 0.6%. The monthly increase in the price of the food proportion of the MEB in the west was driven by the increase in price of tomatoes (+105.0%), potatoes (+22.7%), flour (+20.0%) couscous (16.0%) and sugar (+15.5%). In the south, the food proportion of the MEB slightly increased by 0.6% by 0.6%.
- However, in the south, the food proportion of the MEB decreased by 1.9%. The monthly decrease in the price of the food proportion of the MEB in the south was driven by the decrease in price of condensed milk (-22.1%), canned tuna (-10.0%), pasta (-12.5%), onions (-12.5%), tomato paste (-4.7%) and chicken (-3.6%).

# **JMMI KEY FIGURES**

#### May 2023 data collection from

4th May to the 14th May 2023

1 participating agency (REACH Initiative)

2 assessed cities **56** assessed items **41** assessed shops

#### **MEDIAN COST OF MEB BY REGION IN MAY 2023**

West	979.49 LYD	+1.7%	
East	No data	No data	
South	971 22 IVD	-1.4%	

#### **MARKET SHORTAGES**

None reported

Reported changes are month-on-month



# **PRICES OF MONITORED ITEMS**

Green tea         250 g         5.63         +12.5%         +8           Vegetable oil         1 l         10.99         +9.9%         +14           Black tea         250 g         7.50         +11.1%         +5           Onions         1 kg         3.50         +12.0%         +1           Rice         1 kg         4.88         +2.6%         +5           Eggs         30 eggs         16.25         +8.3%         +6           Pasta         500 g         2.52         -12.5%         +6           Milk         1 l         4.38         -12.5%         +2	56.3% 87.5% 44.1% 60.1% 66.7% 60.0% 62.5% 67.7%
Green tea       250 g       5.63       +12.5%       +8         Vegetable oil       1 l       10.99       +9.9%       +14         Black tea       250 g       7.50       +11.1%       +5         Onions       1 kg       3.50       +12.0%       +1         Rice       1 kg       4.88       +2.6%       +5         Eggs       30 eggs       16.25       +8.3%       +6         Pasta       500 g       2.52       -12.5%       +6         Milk       1 l       4.38       -12.5%       +2	87.5% 44.1% 50.1% 6.7% 50.0% 52.5% 57.7%
Vegetable oil         1 I         10.99         +9.9%         +1           Black tea         250 g         7.50         +11.1%         +5           Onions         1 kg         3.50         +12.0%         +1           Rice         1 kg         4.88         +2.6%         +5           Eggs         30 eggs         16.25         +8.3%         +6           Pasta         500 g         2.52         -12.5%         +6           Milk         1 I         4.38         -12.5%         +2	44.1% 50.1% 16.7% 50.0% 52.5% 57.7%
Black tea       250 g       7.50       +11.1%       +5         Onions       1 kg       3.50       +12.0%       +1         Rice       1 kg       4.88       +2.6%       +5         Eggs       30 eggs       16.25       +8.3%       +6         Pasta       500 g       2.52       -12.5%       +6         Milk       1 l       4.38       -12.5%       +2	50.1% 6.7% 50.0% 52.5% 67.7%
Onions       1 kg       3.50       +12.0%       +1         Rice       1 kg       4.88       +2.6%       +5         Eggs       30 eggs       16.25       +8.3%       +6         Pasta       500 g       2.52       -12.5%       +6         Milk       1 l       4.38       -12.5%       +2	6.7% 60.0% 62.5% 67.7%
Rice     1 kg     4.88     +2.6%     +5       Eggs     30 eggs     16.25     +8.3%     +6       Pasta     500 g     2.52     -12.5%     +6       Milk     1 l     4.38     -12.5%     +2	50.0% 52.5% 57.7% 25.0%
Eggs       30 eggs       16.25       +8.3%       +6         Pasta       500 g       2.52       -12.5%       +6         Milk       1 l       4.38       -12.5%       +2	52.5% 57.7% 25.0%
Pasta 500 g 2.52 -12.5% +6 Milk 1 I 4.38 -12.5% +2	57.7% 25.0%
Milk 11 4.38 -12.5% +2	25.0%
Beans 400 q 3.00 +9.1% +8	
	34.6%
	18.4%
Chickpeas 400 g 3.00 +9.1% +10	00.0%
J 1	25.0%
Potatoes 1 kg 3.38 +22.7% -1	2.5%
3-	76.3%
1	90.6%
	88.8%
	16.1%
9	07.1%
3	50.0%
3	72.5%
3	33.6%
<u> </u>	31.3%
Hygiene items	
	93.8%
Laundry detergent 1 l $8.13$ $+20.4\%$ $+20.4\%$	61.1%
Toothpaste 100 ml 7.92 +5.6% +9	97.9%
Baby diapers 30 17.76 -1.3% +1	8.4%
Handwashing soap 1 bar 2.91 +45.4% +9	93.8%
Laundry powder 1 kg 8.70 +4.4% +3	33.8%
	21.4%
	24.1%
	data
	data
	51.9%
Other items	
Water 1 I 0.29 0.0% 0	

# PRICES OF FUEL AND HEALTH ITEMS

Item	Unit	Median price in May 2023 (LYD)	Change between Apr - May 2023	Change since March 2020
Fuel items				
Unofficial LPG	11 kg	No data	No data	No data
Unofficial Gasoline	11	No data	No data	No data
Official LPG	11 kg	7.25	+45.0%	+45.0%
Official Gasoline	11	0.15	0.0%	No data
Pharmaceutical items				
Paracetamol	400mg [20 pack]	4.25	+45.9%	-10.7%
Vitamin B	[40 pack]	20.00	+27.2%	148.2%
Amoxicillin	500mg [21 pack]	11.25	+50.0%	87.5%
Metoclopramide	10mg [40 pack]	15.07	+37.3%	106.9%
Ibuprofen	400mg [20 pack]	5.83	+85.0%	+96.1%

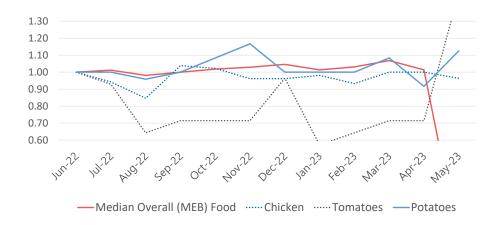
# **NOTABLE MONTH-ON-MONTH CHANGES**

Tomatoes Hand sanitizer LPG ▲ +105.0% ▲ +61.5% ▼ -27.5%



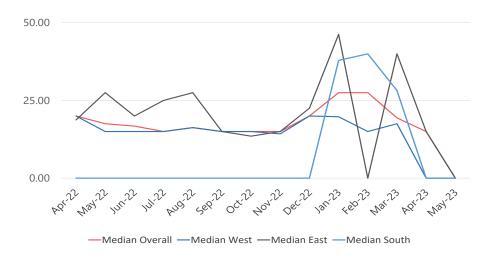
# FLUCTUATION OF FOOD ITEM PRICES OVER TIME \*

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



# PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LIQUEFIED PETROLEUM GAS (LPG) CYLINDER)

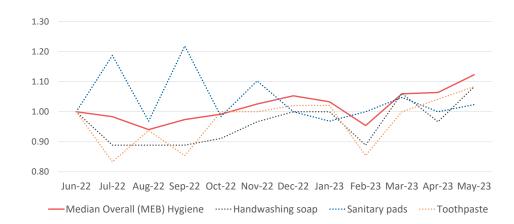
(Since May 2022, Non-normalized)\*\*



<sup>\*</sup> The drop in the overall food proportion of the MEB was due to it, exceptionally, not calculated in May 2023 JMMI round.

# **FLUCTUATION OF HYGIENE ITEMS PRICES OVER TIME**

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

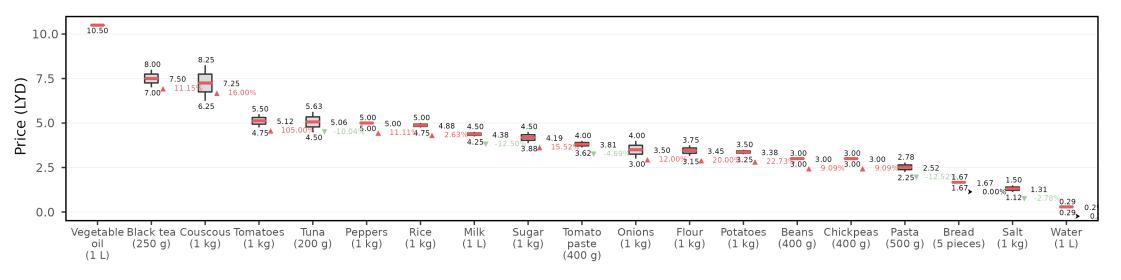




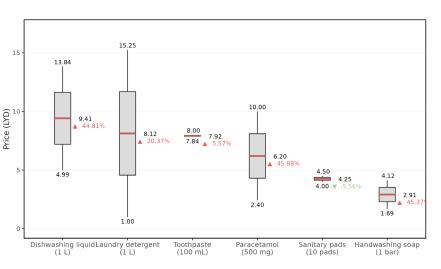
<sup>\*\*</sup> The drops in the medians in the east and west were due to no unofficial cooking fuel data collection in April and May 2023 JMMI round.

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

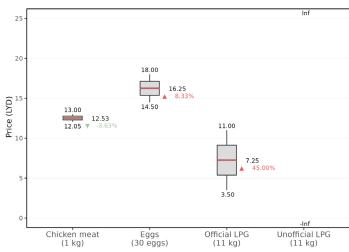
# **FOOD ITEMS**



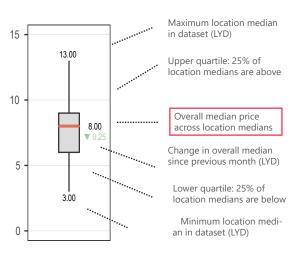
#### **HYGIENE AND HEALTH ITEMS**



## **ITEMS WITH HIGHEST PRICES**



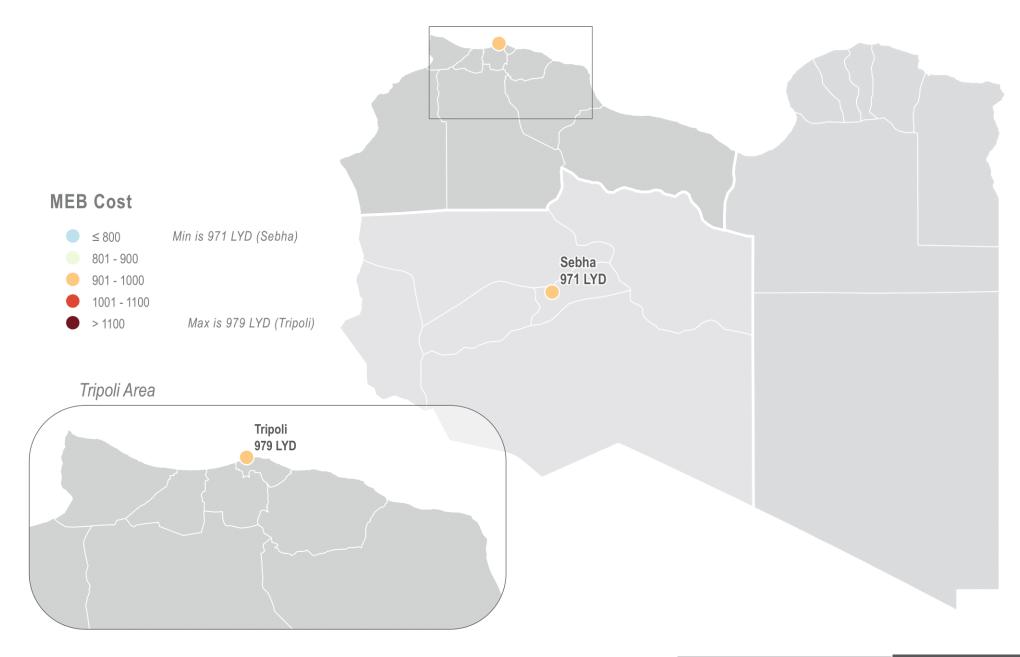
#### **HOW TO READ A BOXPLOT**



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 May 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 I Dishwashing liquid 1.3 I

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 May 2023(LYD)	Change between April-May 2023	Change since March 2020 (compared to May 2023)
Median West	979.49	+1.7%	+56.8%
Median East	No data	No data	No data
Median South	985.47	+1.9%	+12.1%

#### **MEB PRICE INDEX**

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

# COST OF MEDIAN OVERALL MEB IN MAY 2023 IN THE WEST 979.49 LYD

Change since
April 2023
+15.92 LYD
(+1.7%)

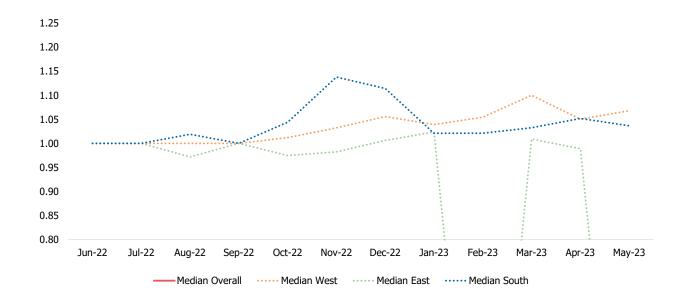
Change since
March 2020
+354.90 LYD
(+56.8%)

# COST OF MEDIAN OVERALL MEB IN MAY 2023 IN THE SOUTH

#### 971.22 LYD

Change since
April 2023
-14.25 LYD
(+1.7%)

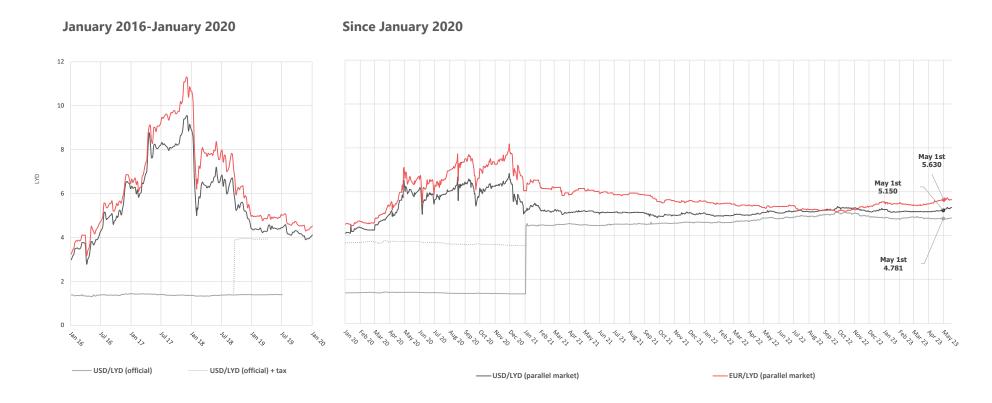
Change since
March 2020
+ 92.19 LYD
(+10.5%)



<sup>\*\*</sup> The drop in the median in the east were due to no data collection in the east in April and May 2023.



# **EXCHANGE RATES OVER TIME**



# **EXCHANGE RATES**

**4.781 USD/LYD**official
-0.4%

5.150 USD/LYD parallel market +1.1% 5.640 EUR/LYD parallel market +3.5%



#### **PREVIOUS JMMI OUTPUTS**

### **Factsheets** 2023

March February

January

#### 2022

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

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

**Datasets** 

March

February

January

#### 2021

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

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

#### 2020

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

December November October September August July June Mav 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.

During May 2023 JMMI round, exceptionally, data was not collected in the east region.

# **Endnotes**

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

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

