Joint Market Monitoring Initiative (JMMI)

2nd April - 13th April 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).

Map 1: Coverage in April 2023

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.

JMMI KEY FINDINGS

- The cost of the MEB across Libya decreased overall (-6.2%) between March and April 2023. The cost of the April 2023 MEB was 47.7% higher than pre-COVID-19 levels in March 2020.
- The cost of the hygiene proportion of the MEB decreased by 12.5%. This monthly decrease of the hygiene component of the MEB from 103.67 to 90.73 LYD was mainly driven by the decrease in price of laundry detergent (-45.3%), hand-washing soap (-34.7%), hand sanitizer (-23.2%) and bleach (-23.1%). Other items showed no or minor changes of increase in price, such as laundry powder (0.0%), toothbrushes (+20.0%), shampoo (+14.3%), sanitary pads (+12.5%) and toothpaste (+3.4%). The cost of the hygiene portion of the MEB in April 2023 was 50.6% higher than pre-COVID-19 levels in March 2020.
- The food proportion of the MEB decreased by 5.1%. The monthly decrease in the price of the food decrease in the price of the food proportion of the overall MEB was mainly driven by the decrease in price of onions (-47.9%), green tea (-27.3%), flour (-14.8%), canned tuna (-12.4%), couscous (-10.7%) and sugar (-9.4%). Other food items showed minor changes or increase in price, such as tomatoes (0.0%), vegetable oil (0.0%), condensed milk (36.4%), salt (+35.0%), rice (+11.8%) and chickpeas (+10.0%) (See page 2).
- Pharmaceutical items showed a decrease in price, such as vitamin B (-36.2%), paracetamol (-30.7%), ibuprofen (-15.6%), metoclopramide (-9.1%) and amoxicillin (-6.3%) (See page 2).
- The fuel proportion of the MEB showed a monthly decrease in price (-18.0%). The value of the fuel component of the MEB decreased from 24.38 LYD in March 2023 to 20.00 LYD in April 2023.

JMMI KEY FIGURES

April 2023 data collection from 2nd April to the 13th April 2023

1 participating agency (REACH Initiative)

3 assessed cities

56 assessed items

54 assessed shops

KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

Apr-23 929.62 LYD

-44.51 LYD

-6.2%

MEDIAN COST OF MEB BY REGION IN APRIL 2023

West	963.57 LYD	-4.5%
East	865.94 LYD	-2.0%
South	985.47 LYD	+1.9%

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 March 2023	Change since March 2020
Food items				
Tomatoes	1 kg	2.50	0.0%	+25.0%
Green tea	250 g	5.00	-27.3%	+66.7%
Vegetable oil	1 I	10.00	0.0%	+122.2%
Black tea	250 g	6.75	-6.9%	+35.0%
Onions	1 kg	3.13	-47.9%	+4.2%
Rice	1 kg	4.75	+11.8%	+46.2%
Eggs	30 eggs	15.00	0.0%	+50.0%
Pasta	500 g	2.88	0.0%	+91.7%
Milk	1	5.00	+17.6%	+42.9%
Beans	400 g	2.75	-4.3%	+69.2%
Bread	5 pieces	1.67	0.0%	+48.4%
Chickpeas	400 g	2.75	+10.0%	+83.3%
Peppers	1 kg	4.50	-14.3%	+12.5%
Potatoes	1 kg	2.75	-15.4%	-8.3%
Sugar	1 kg	3.63	-9.4%	+52.6%
Tomato paste	400 g	4.00	0.0%	+100.0%
Tuna	200 g	5.63	-12.4%	+87.7%
Condensed Milk	200 ml	3.75	+36.4%	+87.5%
Couscous	1 kg	6.25	-10.7%	+78.6%
Lamb meat	1 kg	50.00	-9.9%	+40.8%
Flour	1 kg	2.88	-14.8%	+43.8%
Chicken meat	1 kg	13.00	0.0%	+38.7%
Salt	1 kg	1.35	+35.0%	+35.0%
Hygiene items				
Toothbrush	1 brush	3.00	+20.0%	+50.0%
Laundry detergent	11	6.75	-45.3%	+200.0%
Toothpaste	100 ml	7.50	+3.4%	+87.5%
Baby diapers	30	18.00	-3.5%	+20.0%
Handwashing soap	1 bar	2.00	-34.7%	+33.3%
Laundry powder	1 kg	8.33	0.0%	+28.2%
Sanitary pads	10 pads	4.50	+12.5%	+28.6%
Shampoo	250 ml	7.00	+14.3%	+37.9%
Bleach	1 I	8.56	-23.1%	No data
Hand Sanitizer	11	24.00	-23.2%	No data
Dishwashing liquid	1 I	6.50	+8.3%	+143.0%
Other items				
Water	11	0.29	0.0%	0.0%

PRICES OF FUEL AND HEALTH ITEMS

Item	Unit	Median price in April 2023 (LYD)	Change between Mar - Apr 2023	Change since March 2020
Fuel items				
Unofficial LPG	11 kg	15.00	-22.6%	-57.1%
Unofficial Gasoline	11	No data	No data	No data
Official LPG	11 kg	5.00	0.0%	0.0%
Official Gasoline	1	0.15	0.0%	No data
Pharmaceutical items				
Paracetamol	400mg [20 pack]	4.25	-30.7%	-38.8%
Vitamin B	[40 pack]	20.00	-36.2%	+95.1%
Amoxicillin	500mg [21 pack]	11.25	-6.3%	+25.0%
Metoclopramide	10mg [40 pack]	15.07	-9.1%	+50.7%
Ibuprofen	400mg [20 pack]	5.83	-15.6%	+6.0%

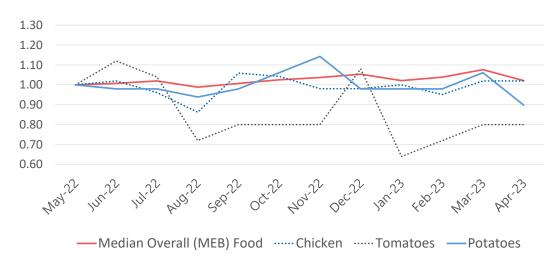
NOTABLE MONTH-ON-MONTH CHANGES

LPG Condensed milk Paracetamol ▲ +100.0% ▲ +36.4% ▼ -30.7%



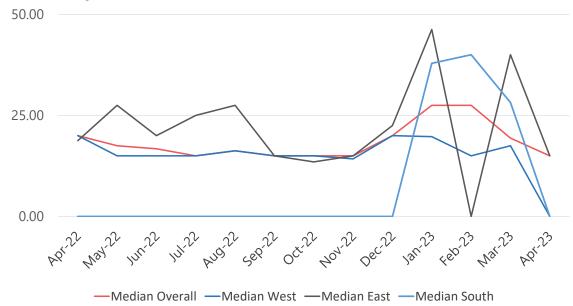
FLUCTUATION OF FOOD ITEM PRICES OVER TIME

Selected items (normalised, May 2022 = 1.00)¹



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

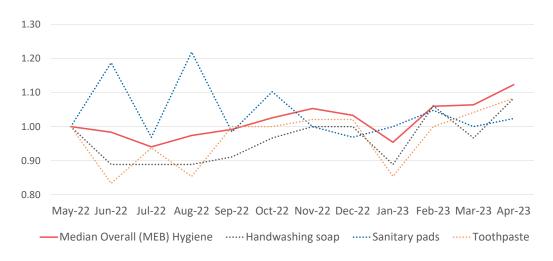
(Since May 2022, Non-normalized)*



^{*} The drops in the medians in the east and west were due to no unofficial cooking fuel data collection in April 2023 JMMI round.

FLUCTUATION OF HYGIENE ITEMS PRICES OVER TIME

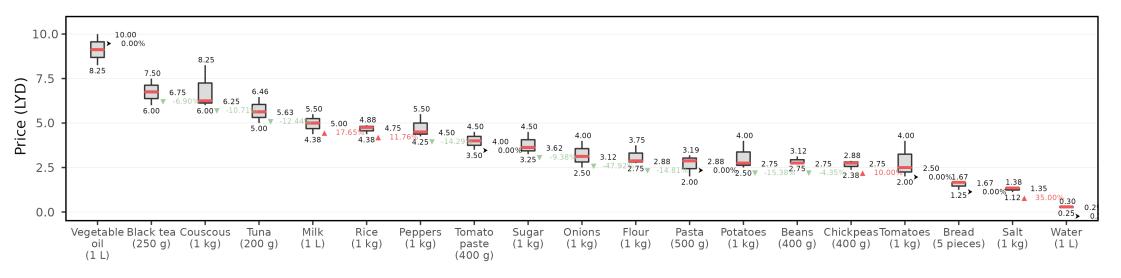
Selected items (normalised, May 2022 = 1.00)²



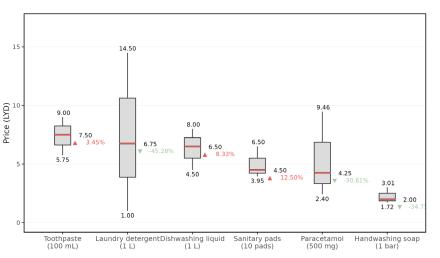


Distribution of Prices in Libya in April 2023

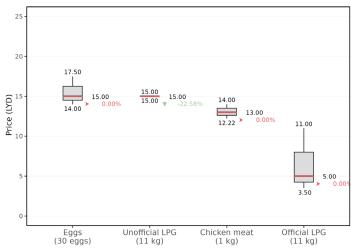
FOOD ITEMS



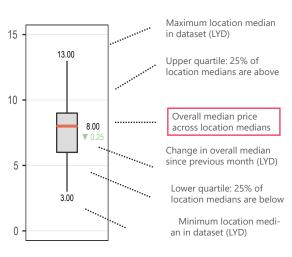
HYGIENE AND HEALTH ITEMS



ITEMS WITH HIGHEST PRICES



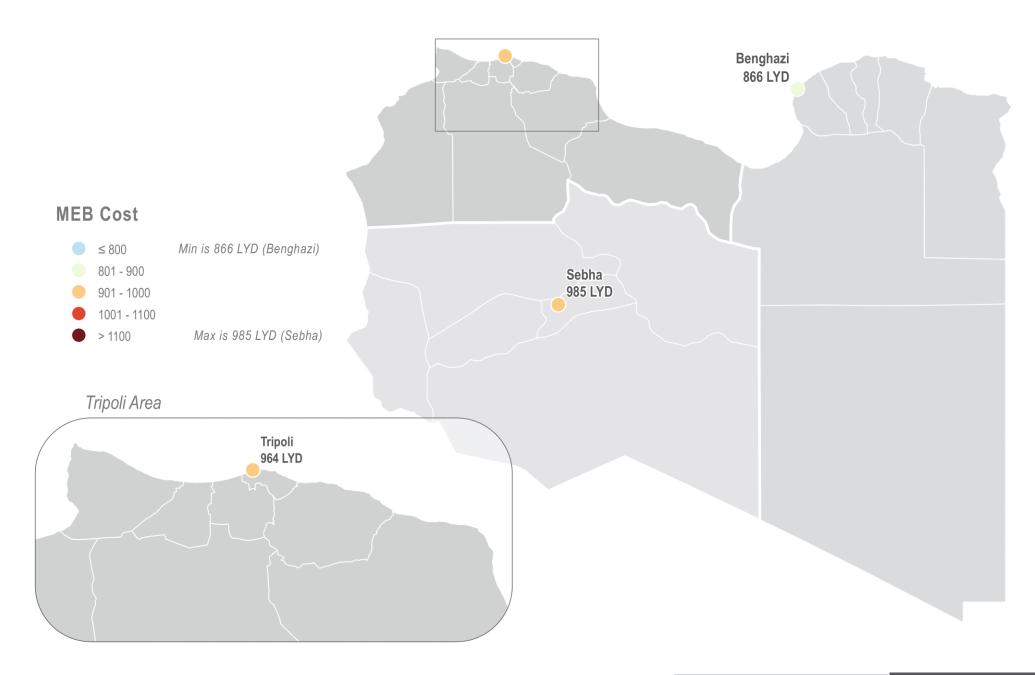
HOW TO READ A BOXPLOT



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 April 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	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 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.

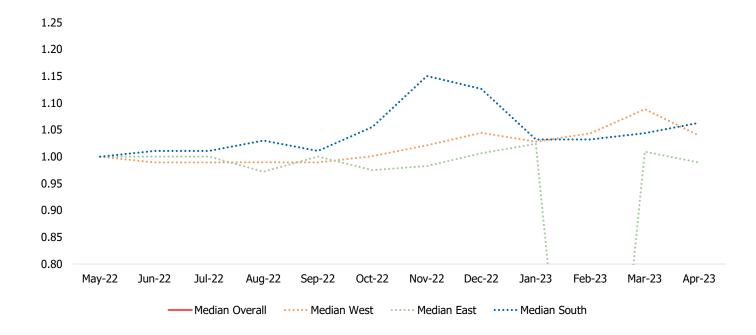
Only the MEB's key elements (food and non-food items) were incorporated into the calculations in this factsheet.

MEDIAN MEB COST BY LOCATION *

Location	Cost of MEB April 2023(LYD)	Change between Mar-April 2023	Change since March 2020 (compared to March 2023)
Median West	963.57	-4.5%	+54.3%
Median East	865.94	-2.0%	+37.4%
Median South	985.47	+1.9%	+12.1%
Median Overall	929.62	-6.2%	+47.7%

MEB PRICE INDEX

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



^{**} Exceptionally and during April 2023 JMMI round, data was collected in Benghazi, Sebha and Tripoli, representing east, west and south.

COST OF MEDIAN OVERALL MEB IN MARCH

929.62 LYD

Change since March 2023 -44.51 LYD (-6.2%) Change since March 2020

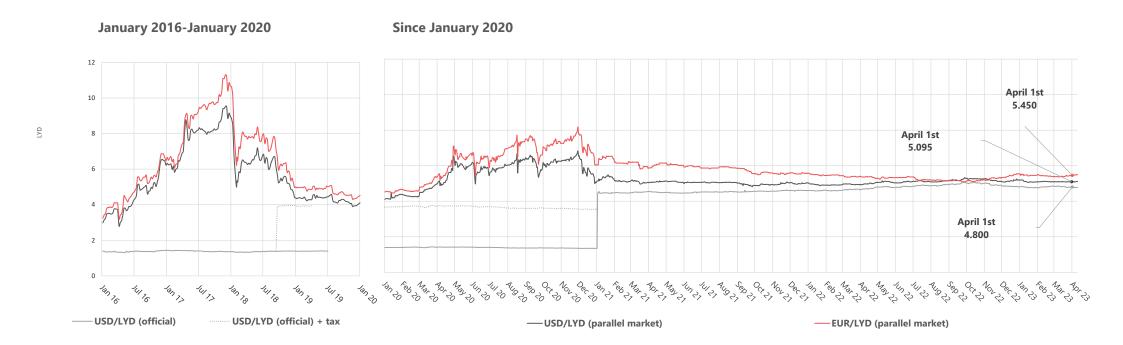
+300.15 LYD

(+47.5%)



^{**} 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

4.800 USD/LYD official -0.9%

5.095 USD/LYD parallel market -0.1% 5.450 EUR/LYD parallel market +0.7%



PREVIOUS JMMI OUTPUTS

Factsheets Datasets

2023

March March February February January January

2022

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

2021

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

December November October September August July June May April March February 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

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 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.

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 3

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

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