Libya Joint Market Monitoring Initiative (JMMI)

1 - 14 July 2022 | 1 - 16 August 2022

INTRODUCTION

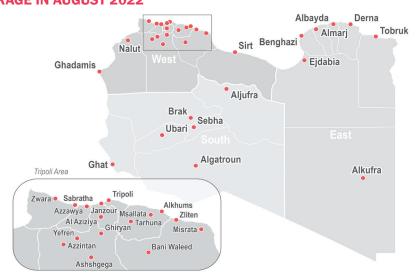
- In an effort to inform cash-based interventions and better understand market dynamics in Libya, the Joint Market Monitoring Initiative (JMMI) was created by the Libya Cash & Markets Working Group (CMWG) in June 2017. The initiative is led by REACH and supported by the CMWG members. It is funded by 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.
- Enumerators were trained on methodology and tools by REACH. Data collection was conducted through the KoBoCollect mobile application.
- During the July and August 2022 rounds, a collection of liquidity items was done. Enumerators have surveyed both vendors and customers from a number of shops to ask questions focused on access to cash and alternative payment modalities. Data collection was different in July (short version of the liquidity data collection) and August (full version of the liquidity data collection on a quarterly basis).
- 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.

- 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.

COVERAGE IN AUGUST 2022



Libya Cash Working Group

REACH Informing more effective humanitarian action

JMMI KEY FINDINGS JUNE-JULY

- · The cost of the MEB across Libya slightly increased overall by +0.2% between June and July 2022 (See page 8).
- The overall slight increase of the cost of the MEB in July 2022 was mainly driven by the increase in the cost of food proportion of the MEB (+1.2%) balanced out by the decrease of fuel (-8.0%) and hygiene proportion of the MEB (-7.6%). The cost of the MEB in July 2022 was +52.6% higher than pre-COVID-19 levels in March 2020.
- Between June and July 2022, the increase in price of the food proportion of the overall MEB was mainly driven by an increase in price of eggs (+28.6%), chickpeas (+10%), condensed milk (+8.2%) and pasta (+5.6%) (See page 3). In the same period, the prices of hygiene items showed a monthly decrease of -7.6%. That was mainly driven by the decrease in price of toothpaste (-16.3%), handwashing soap (-11.1%), laundry powder (-9.7%), and laundry detergent (-7.3%). Pharmaceutical items generally showed no change in price, such as Paracetamol, Ibuprofen, Amoxicillin and Metoclopramide (0.0%) (See page 4).
- The cost of the cooking fuel portion of the overall MEB showed a monthly decrease in July 2022 of -8.0%. The price of the cooking fuel component of MEB shifted from 21.75 LYD in June 2022 to 20.00 LYD in July 2022.

JMMI KEY FINDINGS JULY-AUGUST

In August 2022, the cost of the MEB across Libya decreased overall by -1.7%. This overall decrease was mainly driven by a decrease in the food proportion of the MEB (-3%) balanced out by the increase in the hygiene proportion of the MEB (+11.0%). The cost of the MEB in August 2022 was 41.9% higher than pre-COVID-19 levels in March 2020 (See page 8).

- · Between July 2022 and August 2022, the cost of the food proportion of the overall MEB showed a decrease by -3%. This overall decrease was driven by the decrease in price of some items such as tomatoes (-30.8%), peppers (-25.0%), milk (-10.5%) and onions (-10.0%). The cost of the hygiene proportion of the overall MEB showed also an increase by +11.0%. This was mainly driven by the increase in prices of some items such as handwashing soap (+19.4%), toothpaste (+17.1%) and bleach (+14.5%) Pharmaceutical items generally showed a decrease in price, such as Ibuprofen (-19.2%), Paracetamol (-12.0%), Ibuprofen, Amoxicillin and Metoclopramide (-17.4%) (See page 4).
- The cost of the cooking fuel portion of the overall MEB showed a monthly increase in August 2022 of +6.3%. The price of the cooking fuel component of MEB shifted from 20.00 LYD in July 2022 to a value of 21.25 LYD in August 2022.

JMMI KEY FIGURES

Jul-data collection from 1 - 14 July 2022

3 participating agencies: (REACH, WFP, DRC) **40** assessed cities **56** assessed items 660 assessed shops

Aug-data collection from 1 - 16 August 2022

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

KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

Jul-22 908.81 LYD \triangle +1.69 LYD \triangle +0.2% **Aug-22 893.22 LYD ▼** - 15.69 LYD ▼ -1.7%

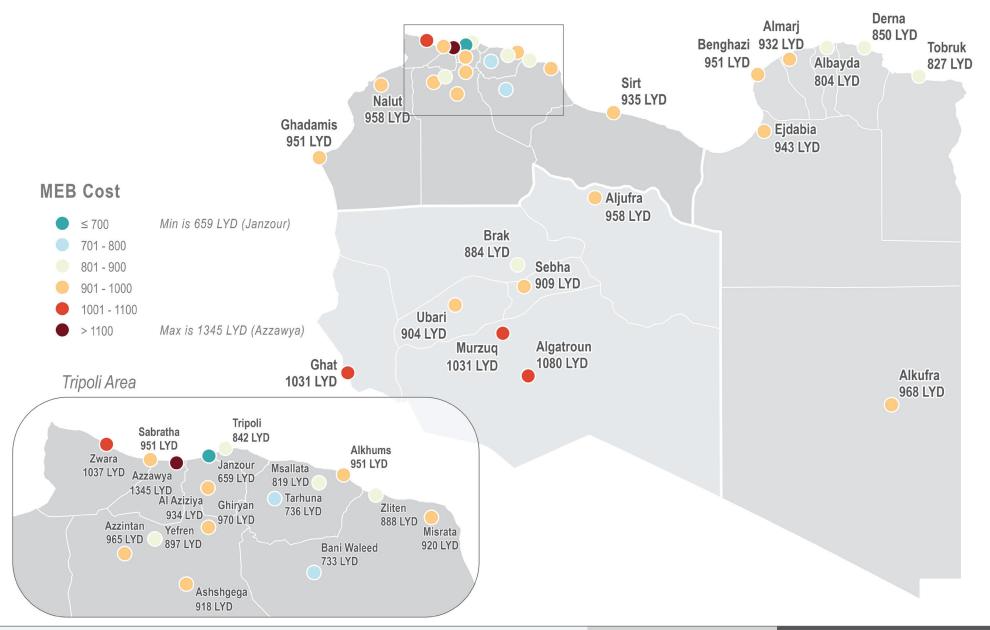
MEDIAN COST OF MEB BY REGION IN JULY 2022

West 910.87 LYD **▼** -3.3% 912.01 LYD **▲** +6.4% East 954.52 IYD **▼** -1.3% South

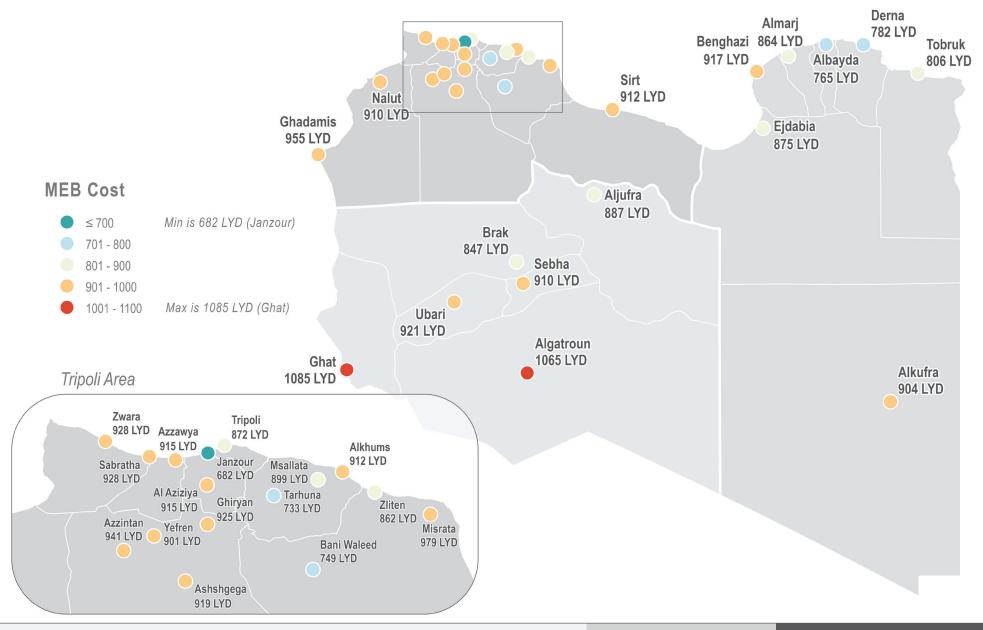
MEDIAN COST OF MEB BY REGION IN AUGUST 2022

West	917.38 LYD	▲ +0.7%
East	850.93 LYD	▼ -6.7%
South	954 78 LYD	0.0%

Cost of MEB Key Elements by Location in July 2022



Cost of MEB Key Elements by Location in August 2022



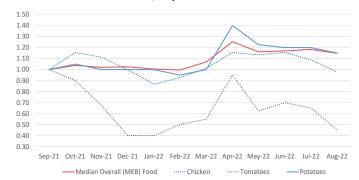
PRICES OF MONITORED ITEMS

Item	Unit	Median price in July 2022 (LYD)	Change between Jun-Jly 2022	Median price in August 2022 (LYD)	Change between Jly-Aug 2022	Change since March 2020*
Food items						
Tomatoes	1 kg	3.25	-7.1%	2.25	-30.8%	+12.5%
Green tea	250 g	5.31	+6.3%	5.00	-5.9%	+66.7%
Vegetable oil	1 L	12.00	0.0%	13.00	+8.3%	+188.9%
Black tea	250 g	6.50	-7.1%	7.00	+7.7%	+40.0%
Onions	1 kg	2.50	+2.6%	2.25	-10.0%	-25.0%
Rice	1 kg	4.81	-3.8%	4.50	-6.5%	+38.5%
Eggs	30 eggs	13.50	+28.6%	12.25	-9.3%	+22.5%
Pasta	500 g	2.66	+5.6%	3.00	+13.0%	+100.0%
Milk	1 L	4.75	-5.0%	4.25	-10.5%	+21.4%
Beans	400 g	2.75	+10.0%	2.69	-2.3%	+65.4%
Bread	5 pieces	1.67	0.0%	1.67	0.0%	+48.4%
Chickpeas	400 g	2.75	+10.0%	2.56	-6.8%	+70.8%
Peppers	1 kg	4.50	0.0%	3.38	-25.0%	-15.6%
Potatoes	1 kg	3.00	0.0%	2.88	-4.2%	-4.2%
Sugar	1 kg	4.06	+1.6%	4.00	-1.5%	+68.4%
Tomato paste	400 g	3.88	0.0%	4.00	+3.2%	+100.0%
Tuna	200 g	5.58	+5.6%	5.50	-1.4%	+83.3%
Condensed Milk	200 mL	2.25	+8.2%	2.23	-1.1%	11.3%
Couscous	1 kg	7.00	+1.8%	7.13	+1.8%	+103.6%
Lamb meat	1 kg	45.00	-4.3%	45.25	+0.6%	+27.5%
Flour	1 kg	3.53	+0.7%	3.63	+2.8%	+81.3%
Chicken meat	1 kg	12.25	-5.8%	11.00	-10.2%	+17.3%
Salt	1 kg	1.00	0.0%	1.00	0.0%	0.0%
Hygiene items						
Toothbrush	1 brush	3.00	0.0%	3.00	0.0%	+50.0%
Laundry detergent	1 L	5.89	-7.3%	7.00	+18.9%	+211.1%
Toothpaste	100 mL	5.13	-16.3%	6.00	+17.1%	+50.0%
Baby diapers	30	19.04	-0.6%	21.12	+10.9%	+40.8%
Handwashing soap	1 bar	2.00	-11.1%	2.39	+19.4%	+59.2%
Laundry powder	1 kg	7.00	-9.7%	6.91	-1.4%	+6.2%
Sanitary pads	10 pads	4.00	+3.2%	4.19	+4.7%	+19.7%
Shampoo	250 mL	6.25	+11.1%	6.00	-4.0%	+18.2%
Bleach	1 L	9.36	+6.9%	10.71	+14.5%	No data
Hand Sanitiser	1 L	23.25	-7.0%	24.50	+5.4%	No data
Dishwashing liquid	1 L	3.13	+55.3%	1.44	-53.9%	-46.2%
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 August 2022 values.

FLUCTUATION OF FOOD PRICES OVER TIME

Selected items (normalised, September 2021 = 1.00)¹

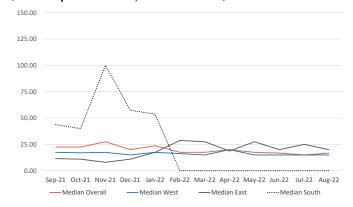


PRICES OF FUEL AND HEALTH ITEMS

Item	Unit	Median price in July 2022 (LYD)	Change between Jun-Jly 2022	Median price in August 2022 (LYD)	Change between Jly-Aug 2022
Fuel items					
Unofficial LPG	11 kg	15.00	-10.4%	16.25	+8.3%
Unofficial Gasolin	e 1 Litre	0.60	-31.4%	0.88	+46.7%
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]	8.00	0.0%	7.00	-12.5%
Vitamin B	[40 pack]	15.65	+0.9%	17.42	+11.3%
Amoxicillin	500mg [21 pack]	10.25	0.0%	10.00	-2.4%
M etoclopramide	10mg [40 pack]	15.50	0.0%	12.80	-17.4%
Ibuprofen	400mg [20 pack]	6.19	-7.5%	5.00	-19.2%

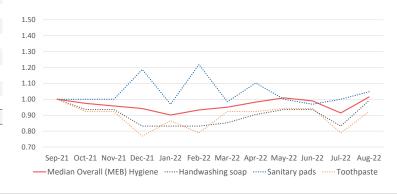
PRICES FROM UNOFFICIAL COOKING FUEL VENDOR (11 KG LIQUEFIED PETROLEUM GAS (LPG) CYLINDEK)

(Since September 2021, non-normalised)**



FLUCTUATION OF HYGIENE ITEM PRICES OVER TIME

Selected items (normalised, September 2021 = 1.00)²



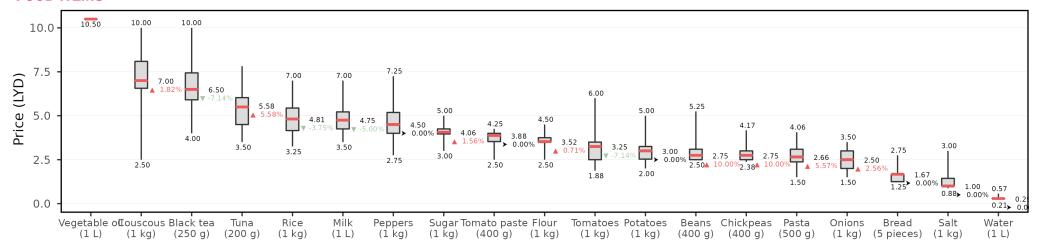
NOTABLE MONTH-ON-MONTH CHANGES

August 2022	Tomatoes	▼ -30.8%
7 7	Peppers	▼ -25.0%
j D	Unofficial gasoline	▲ +46.7%
2	Handwashing soap	▲ +19.4%
	Eggs	▲ +28.6%
	Dishwashing liquid	▲ +55.3%
	Unafficial macalina	▼ -31.4%
Jacy 2022	Unofficial gasoline	V -31.470

^{**} The median in the south is unavailbale for February & March 2022 due to missing data.

Distribution of Prices in Libya in July 2022

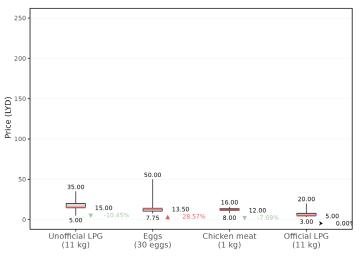
FOOD ITEMS



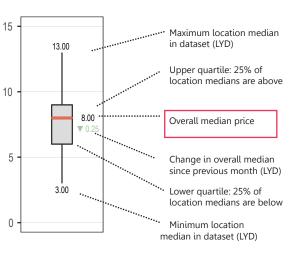
HYGIENE AND HEALTH ITEMS

250 15.50 Price (LYD) 100 Price (LYD) 8.00 0.00% 5.89 5.12 4.00 35.00 3.12 2.00 1 47 1.00 Toothpaste (100 mL) Paracetamol (500 mg) (11 kg) Laundry detergent Sanitary pads Dishwashing liquidHandwashing soap (10 pads)

ITEMS WITH HIGHEST PRICES



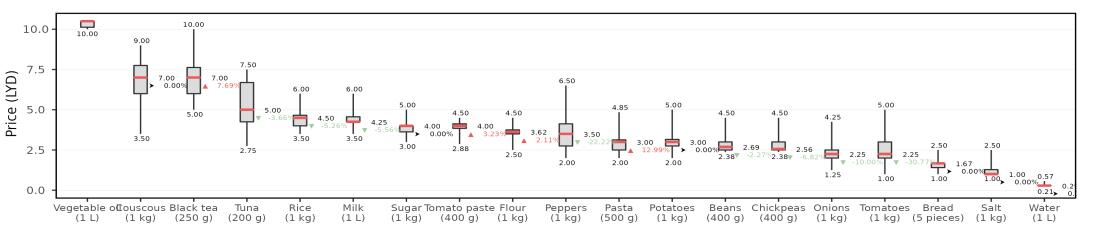
How to read a boxplot



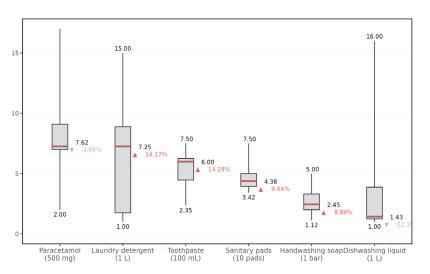
The 'location median' is calculated by first finding the median price of a given item in each assessed location, then taking the median of the resulting set of median prices.

Distribution of Prices in Libya in August 2022

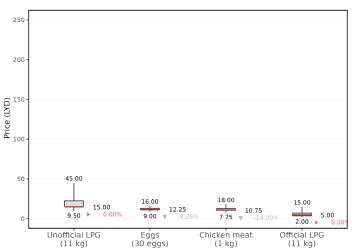
FOOD ITEMS



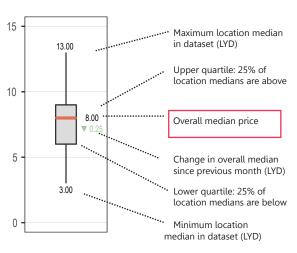
HYGIENE AND HEALTH ITEMS



ITEMS WITH HIGHEST PRICES

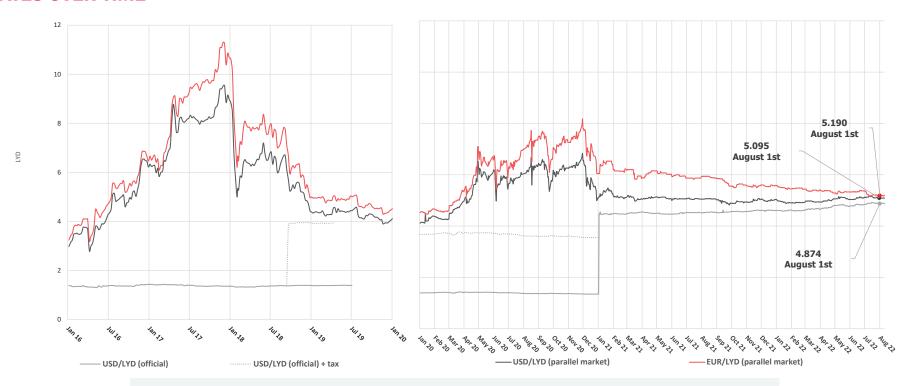


How to read a boxplot



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



EXCHANGE RATES 4

JULY 2022

AUGUST 2022

4.844 USD/LYD

official

▲ +1.4%

4.878 USD/LYD

official

▲ +0.6%

5.130 USD/LYD

parallel market

▲ +1.8%

5.095 USD/LYD

parallel market

▼ -0.7%

5.370 EUR/LYD

parallel market

▲ +0.8%

5.190 EUR/LYD

parallel market

▼ -3.4%

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

1.4 kg (9 150-g bars) Bathing soap Toothpaste 0.5 kg (5 100-g tubes)

Laundry detergent 1.3 L Dishwashing liquid 1.3 L

Sanitary pads 4 packs of 10

22 kg (2 11-kg refills) Cooking fuel (LPG)

Optional Elements

Water (drinking use only) 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 July 2022 (LYD)	Change between Jun-Jly 2022	Cost of MEB Aug 2022 (LYD)	Change between Jly-Aug 2022	Change since March 2020 (compared to August 2022)
Nalut	957.51	+3.0%	909.98	-5.0%	+24.3%
Azzintan	965.47	+2.0%	941.49	-2.5%	+38.4%
Ghiryan	970.09	+5.4%	925.12	-4.6%	+32.6%
Zwara	1036.92	+6.2%	927.62	-10.5%	+69.6%
Ghadamis	950.97	-3.8%	955.12	+0.4%	+39.8%
Sabratha	951.47	-1.2%	927.62	-2.5%	+66.4%
Azzawya	1344.78	+41.9%	915.12	-32.0%	+67.6%
Sirt	934.88	-2.7%	911.77	-2.5%	+50.6%
AlKhums	950.97	+0.3%	912.12	-4.1%	+68.9%
Misrata	919.93	-2.8%	979.27	+6.5%	+74.6%
Al Aziziya	933.80	-1.8%	915.12	-2.0%	+67.2%
Ashshgega	918.10	-0.1%	919.08	+0.1%	+42.3%
Zliten	887.83	+0.6%	861.52	-3.0%	+40.0%
Yefren	896.68	+1.8%	901.19	+0.5%	+37.5%
Tripoli	841.70	-4.8%	872.04	+3.6%	+33.2%
Msallata	818.55	-3.0%	898.50	+9.8%	+50.7%
Tarhuna	736.48	-7.9%	733.32	-0.4%	+24.6%
Bani Waleed	733.10	-6.1%	749.32	+2.2%	+25.5%
Janzour	658.60	-9.1%	682.48	+3.6%	+15.1%
Median West	910.87	-3.3%	917.38	+0.7%	+46.9%
Benghazi	950.65	+6.9%	917.47	-3.5%	+49.9%
Ejdabia	942.69	+4.1%	874.84	-7.2%	+34.8%
AlMarj	932.28	-2.0%	864.43	-7.3%	+35.1%
AlKufra	968.04	+12.7%	904.06	-6.6%	+38.5%
Tobruk	827.12	-2.6%	805.98	-2.6%	+28.2%
AlBayda	804.23	-2.8%	765.13	-4.9%	+18.6%
Derna	850.08	+6.1%	781.78	-8.0%	+28.4%
Median East	912.01	+6.4%	850.93	-6.7%	+35.0%
Algatroun	1079.65	+4.6%	1065.41	-1.3%	-5.8%
Ghat	1030.68	-6.3%	1085.20	+5.3%	-5.2%
Ubari	903.64	-4.3%	920.94	+1.9%	-15.6%
Aljufra	957.82	+6.4%	886.89	-7.4%	+14.9%
Brak	884.17	+4.4%	846.67	-4.2%	+16.1%
Sebha	909.04	+3.5%	910.32	+0.1%	+20.5%
Median South	954.52	-1.3%	954.78	0.0%	+8.6%
Median Overall	908.81	+0.2%	893.22	-1.7%	+41.9%

COST OF MEDIAN OVERALL MEB IN JULY 2022

908.81 LYD

Change since June 2022

Change since March 2020

▲ + 1.69 LYD (+0.2%)

▲ + 279.34 LYD (+32.3%)

COST OF MEDIAN OVERALL MEB IN AUGUST 2022

893.22 LYD

Change since July 2022 ▼ -15.59 LYD

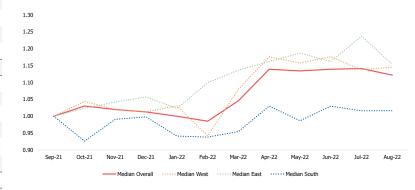
Change since March 2020 ▲ + 263.76 LYD

(-1.7%)

(+41.9%)

MEB PRICE INDEX

Since September 2021 (normalised, September 2021 = 1.00)⁵



Liquidity and Financial Infrastructure July & August 2022

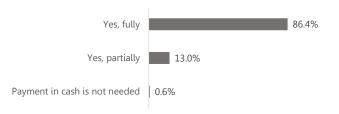
Methodology

- In July and August 2022, JMMI collected a series of additional data on the ability to access cash and payment modalities from vendors (657 in July 2022, 664 in August 2022) and customers (599 in July 2022, 563 in August 2022). Data was not collected for all indicators in July and as such certain comparisons are instead made between June and August.
- Due to non-probability sampling, findings are indicative only. For more information on the methodology, please refer to the appendix.

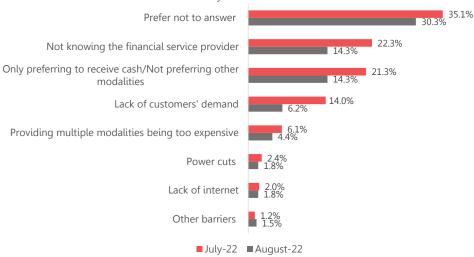
Vendor Key Informant Interviews

- The ability to access cash that is reported by vendor KIs remains important. Similarly to June 2022 (72.4%), in August 2022, most vendors (86.4%) reported being fully able to access enough cash to make their necessary payments. Other vendor KIs reported being partially able to access enough cash (13.0%).
- The cash payment modality throughout the recent months of May, June, July and August 2022 remains the most widely used by customers in the shops as reported by vendor KIs. Almost all interviewed vendors in both July (100%) and August 2022 (99.8%) reported cash as the most widely used payment modality by customers in their shops. In August 2022, only 7.5% reported the credit and debit card, ATIB card (4.2%), mobile money (4.1%), bank transfer (1.5%), cheques and credit modalities (0.8%). When asking the interviewed vendors about the barriers to using multiple payment modality types, many respondents preferred not to answer (35.1% in July 2022 and 30.3% in August 2022). Other vendor KIs reported their preference to cash only and not preferring any other modalities (21.3% in July 2022 and 14.3% in August 2022), not knowing the financial service providers (22.3% in July 2022 and 14.3% in August 2022), lack of demand (14.0% in July 2022 and 6.2% in August 2022). Finally, other vendor KIs reported providing multiple payment modalities being too expensive (6.1% in July 2022 and 4.4% in August 2022).
- When asking vendor KIs about how often they deposit sales revenues in the bank, most interviewed vendors in August 2022 preferred not to answer (52.1%). In July 2022, most vendor KIs (57.8%) reported never depositing sales revenues in the bank in July 2022, while only 27.1% reported that in August 2022. The rest of the vendor KIs reported every month (14.6% in July 2022 and 11.6% in August 2022), every three months (3.0% in July 2022 and 3.5% in August 2022), every six months (1.2% in July 2022 and 2.6% in August 2022).
- When asked about why they never deposit sales' revenues in the bank, most interviewed vendors in July 2022 reported preferring dealing in cash only/not preferring to deposit (50.0%). Other vendor KIs reported having to deal with the shop's necessities in terms of expenses (salaries, rent) and important transactions such as buying merchandise/dealing (31.3%) in cash, lack of liquidity/trust in the banking system (7.9%), not knowing the main reason (7.1%) due to the interviewed vendor not being not the shop's owner. In August 2022, when asked about the main reason never depositing sales' revenues in the bank, 39.4% of vendor KI preferred to not answer, 26.1% reported not being the shop owner and hence not knowing the reason, 20.0% reported preferring holding on to cash and 14.4% reported the lack of trust in the banks.

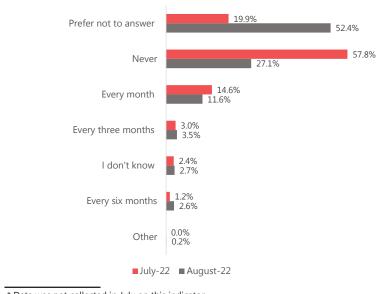
% of vendor KIs that reported the following ability accessing enough cash making their payments, August 2022 *



% most commonly reported barriers to supporting multiple payment modalities by vendor KIs **



Frequency of depositing sales revenues in the bank, as reported by vendor KIs



^{*} Data was not collected in July on this indicator.



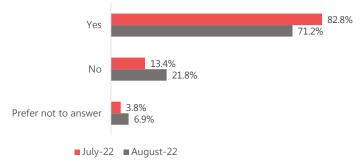
^{**}This was a multiple choice question.

Liquidity and Financial Infrastructure July & August 2022

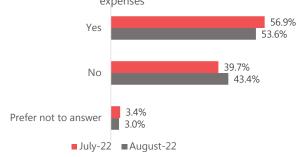
Customer Key Informant Interviews

- In both July and August 2022, most of the interviewed customers reported being able to withdraw cash in the 30 days prior to data collection (82.8% in July, 71.2% in August), similarly to both April (83.8%), May (84.1%) and June 2022 (63.1%).
- Among the customers reporting that they were able to withdraw cash in the 30 days prior to data collection most reported that the cash withdrawn was sufficient to meet their monthly expenses, 56.9% in July and 53.6% in August. However 39.7% in July and 43.4% in August reported that the cash withdrawn was not sufficient.
- In August 2022, similarly to June 2022 (98.6%), cash remains the main reported payment modality as the most commonly used by customer KIs when buying everyday items (97.5%). Other customer KIs reported using credit and debit cards (11.4%), cheques (7.5%) bank transfer (1.8%) and credit (1.8%).
- When asking the interviewed customers regarding ways to attain cash, outside of the banking system, most customer KIs reported getting cash from their workplaces (35.2% in July and 29.7% in August 2022). Other customer KIs reported selling cheques on the parallel market, an alternative which resorting to increased in August 2022 (28.4%) in comparison to July 2022 (19.0%). Customer KIs reported also paying with credit card (1.5% in July and 8.2% in August 2022) alternatives, borrowing cash from vendors (2.3% in July and 1.6% in August 2022) and liquidity being enough (4.8% in July and 1.8% in August 2022).

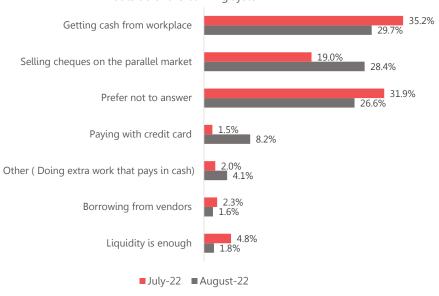
% of customers reporting on their ability to withdraw cash in the 30 days prior to data collection



Proportion of customers reporting on the sufficiency of the cash withdrawn to meet their needs for the month's expenses



Proportion of customers reporting on their use of ways to attain cash outside of the banking system*



^{*} This was a multiple choice question.



PREVIOUS JMMI OUTPUTS

Factsheets Datasets 2022

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 Juńe 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 Apŕil 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 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.

Liquidity Crisis

The respondents were vendors and customers from market places already monitored by the JMMI.

Respondents were selected purposively, with an average number of 8 customers and 4 vendors per region. The findings are indicative and not statistically representative.

One of the main limitations faced during data collection is the the sensitivity of some questions regarding deposits' details and financials with the key informants preferring to skip and not answer some important but sensitive questions.

Endnotes

- ¹ The food prices were normalised by setting September 2021 as the baseline and dividing each month's price by the price in September 2021.
- ²The hygiene prices were normalised by setting September 2021 as the baseline and dividing each month's price by the price in September 2021.
- ³ Official rate: Central Bank of Libya (1 January 2021). Parallel market rates: Ewan Libya (1 January 2021). Both the official and the parralel market rates from January 2021 were used for the calculation of the monthly changes.
- ⁴ Official rate: Central Bank of Libya (27 January 2021). Parallel marketrates: The rates from 1 January 2021 and 1 January 2020 were used for the calculation of the monthly changes (http://www.ewanlibya.ly/).
- ⁵ The MEB price index was normalised by setting September 2021 as the baseline and dividing each month's price by the price in September 2021).

REACH is a program of ACTED. It strengthens evidence based decision-making by humanitarian actors through efficient data collection, management and analysis in contexts of crisis.

ACTED is an international NGO. Independent, private and non-profit, ACTED respects a strict political and religious impartiality, and operates following principles of non-discrimination, and transparency. Since 2011, ACTED has been providing humanitarian aid and has supported civil society and local governance throughout Libya, from its offices in Tripoli, Sebha and Benghazi.