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

1-8 September 2018

### Libya Cash & Markets Working Group



#### 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 guided by the CMWG Markets Taskforce, led by REACH and supported by the CMWG members. It is funded by OFDA and UNHCR.

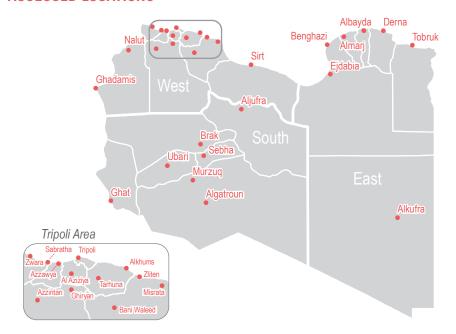
Markets in key urban areas across Libya are assessed on a monthly basis. In each location, field teams record prices and availability of basic food and non-food items (NFI) sold in local shops and markets.

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, normalising prices, crosschecking outliers and calculating the median cost of an MEB in each assessed market.
- More details are available in the Methodology section of the Appendix.

#### ASSESSED LOCATIONS



#### **KEY FINDINGS**

- In September, due to depreciation of the Libyan dinar, the overall median cost of the MEB slightly increased by 1.3%, compared to August, reaching 864.96 LYD.¹ The updated cost of the MEB included an increase in median food prices by 2.3% across Libya. Among notable changes, the median cost of peppers rose by 18.8% in September, due to clashes in areas of bell pepper production.
- Across Libya, while bread prices did not increase in September, strong variations remained among cities assessed. In the east, price fluctuations since August for 5 pieces of bread varied from +140.0% in Benghazi (3.00 LYD) to -24.1% in Derna (0.65 LYD). According to KIs, this volatility in prices is due to sporadic distribution of subsidised flour to bakers by the government in the east region.<sup>2</sup>
- The overall decrease (-4.8%) in the median price of cooking fuel (LPG) was impacted by the decreasing median prices in the west (-6.7%). However, due to clashes in Tripoli, strong variations were noticed in western Libya. Shipments of LPG from Tripoli were confined to the capital due to road closures, which led to disruptions to the supply of western cities and a sharp increase in LPG prices in places such as Al Aziziya (+576.2%) and Azzawya (+337.5%). Inversely, as the supply of LPG was higher in Tripoli, a decline in demand on the parallel market led to a decrease in LPG prices by 82.9% in Tripoli centre.
- To narrow the gap between official and parallel market exchange rates, the Central Bank of Libya (CBL) has imposed a 183% fee on foreign currency transactions since 19 September 2018. This new tax does not apply to the 1,000 USD allowance granted to compensate for the reduction of subsidies.<sup>3</sup>

#### **JMMI KEY FIGURES**

Data collection from 1-8 September 2018

- 5 participating agencies (ACTED, DRC, Mercy Corps, REACH, WFP)
- 29 assessed cities
- 34 assessed items
- 426 assessed shops

#### **EXCHANGE RATES**<sup>4</sup>

1.378
USD/LYD

official

▶ 0.0%

6.700
USD/LYD
parallel market

4 +5.1%

7.796
EUR/LYD
parallel market
4.3%

#### KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

Food items Hygiene items Cooking fuel
+2.3% V -8.1% V -4.8%

#### MEDIAN COST OF MEB BY REGION

West 829.85 LYD -0.5% ▼
East 846.24 LYD +1.6% ▲
South 1112.67 LYD +4.6% ▲

#### **MARKET SHORTAGES**

None reported

Reported changes are month-on-month

Access the JMMI online dashboard

#### MINIMUM EXPENDITURE BASKET (MEB)

#### **Key Elements: Food Items**

| Bread    | 38 kg   | Tomatoes      | 12 kg |
|----------|---------|---------------|-------|
| Rice     | 12.5 kg | Potatoes      | 14 kg |
| Pasta    | 11 kg   | Onions        | 8 kg  |
| Couscous | 6.5 kg  | Peppers       | 5 kg  |
| Beans    | 7 kg    | Tomato paste  | 7 kg  |
| Chicken  | 9 kg    | Black tea     | 2 kg  |
| Tuna     | 4.5 kg  | Vegetable oil | 6 L   |
| Eggs     | 4.5 kg  | Sugar         | 2 kg  |
| Milk     | 10 L    | Salt          | 1 kg  |

#### **Key Elements: Non-Food Items**

Bathing soap 1.5 kg (10 150-g bars) Toothpaste 0.6 kg (6 100-g tubes)

Laundry detergent 1.5 L Dishwashing liquid 1.5 L

Sanitary pads 4 packs of 10 Cooking fuel (LPG) 22 kg (2 11-kg refills)

Optional Elements<sup>5</sup>

Water (drinking and

domestic use) 2,790 L Median rent for 3-rm flat 1 month

Float<sup>6</sup> 20% of key elements

The Minimum Expenditure Basket (MEB) represents the minimum culturally adjusted group of items required to support a six-person Libyan household 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.

# COST OF MEDIAN OVERALL MEB 864.96 LYD

Change since August 2018 10.82 LYD

**10.82 LYD** (+1.3%)

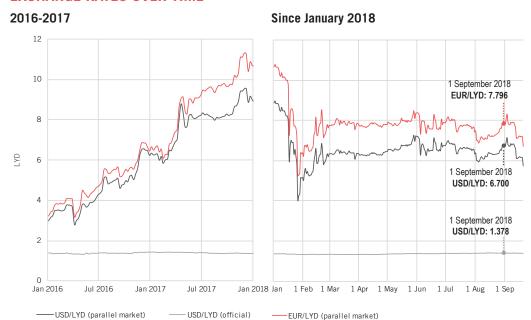
Change since May 2018 • 82.50 LYD

(+10.5%)

#### MEDIAN MEB COST BY LOCATION

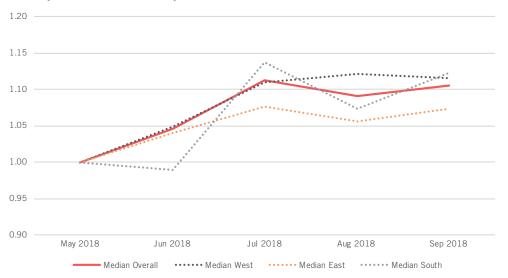
| Location       | Cost of key<br>elements<br>(LYD) | Change<br>since<br>Aug 2018 | Change<br>since<br>May 2018 |
|----------------|----------------------------------|-----------------------------|-----------------------------|
| Zwara          | 1032.76                          | +5.4%                       | +24.8%                      |
| Azzawya        | 1004.64                          | +9.7%                       | +27.9%                      |
| Al Aziziya     | 1004.14                          | 1004.14 +7.4%               |                             |
| Sabratha       | 973.54                           | 973.54 +5.9%                |                             |
| Nalut          | 956.28                           | +13.9%                      | +10.6%                      |
| Ghadamis       | 947.75                           | -2.4%                       | +18.9%                      |
| Alkhums        | 855.37                           | +6.2%                       | +20.0%                      |
| Sirt           | 828.84                           | +2.3%                       | +18.9%                      |
| Misrata        | 824.72                           | +5.8%                       | +22.0%                      |
| Tripoli        | 824.02                           | +0.2%                       | +15.4%                      |
| Tarhuna        | 813.65                           | -2.8%                       | No data                     |
| Azzintan       | 798.65                           | +1.2%                       | +9.4%                       |
| Bani Waleed    | 769.34                           | +3.0%                       | No data                     |
| Ghiryan        | 762.36                           | -2.6%                       | +2.7%                       |
| Zliten         | 756.54                           | -0.9%                       | +1.0%                       |
| Median West    | 829.85                           | -0.5%                       | +11.6%                      |
| Alkufra        | 1066.87                          | +6.8%                       | +10.1%                      |
| Derna          | 885.76                           | +3.2%                       | -11.3%                      |
| Benghazi       | 884.22                           | +8.6%                       | +17.3%                      |
| Tobruk         | 868.13                           | +6.6%                       | +9.3%                       |
| Almarj         | 859.88                           | +5.3%                       | +9.8%                       |
| Albayda        | 846.94                           | 846.94 +3.0%                |                             |
| Ejdabia        | 798.42                           | +4.8%                       | +16.5%                      |
| Median East    | 846.24                           | +1.6%                       | +7.3%                       |
| Ghat           | 1288.50                          | +9.2%                       | +26.4%                      |
| Ubari          | 1212.95                          | +1.2%                       | +9.9%                       |
| Algatroun      | 1202.44                          | -3.2%                       | +6.7%                       |
| Murzuq         | 1119.87                          | +10.0%                      | +4.9%                       |
| Aljufra        | 1072.63                          | +4.9%                       | +21.6%                      |
| Brak           | 936.34                           | +3.9% +9.2%                 |                             |
| Sebha          | 921.18                           | +5.9% -3.8%                 |                             |
| Median South   | 1112.67                          | +4.6%                       | +12.3%                      |
| Median Overall | 864.96                           | +1.3%                       | +10.5%                      |

#### **EXCHANGE RATES OVER TIME**<sup>4</sup>



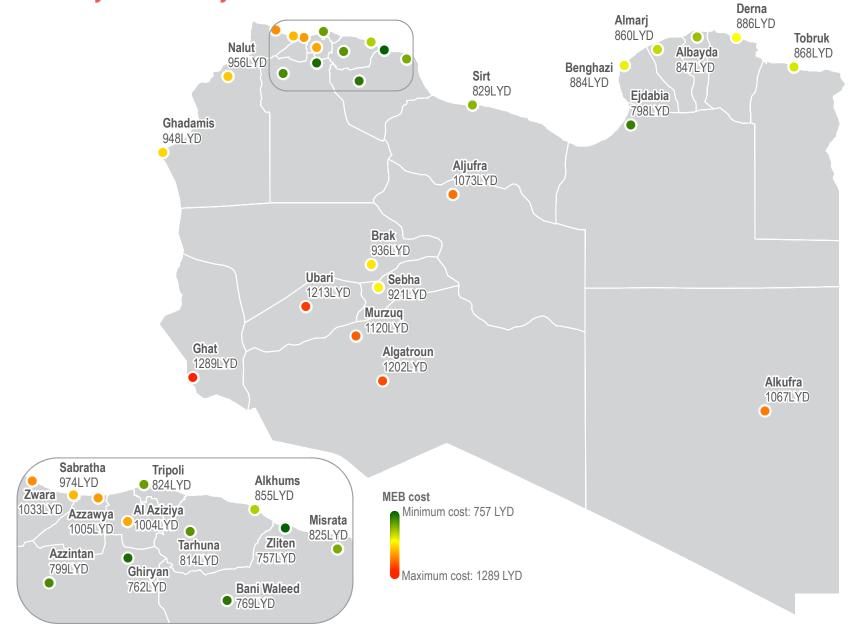
#### **MEB PRICE INDEX**

Since May 2018 (normalised, May 2018 = 1.00)<sup>7</sup>



Note: The formulas used to calculate the MEB were changed prior to the publication of the September 2018 factsheets and datasets from May to September 2018 have been retroactively revised to include the updated MEB figures.

# **Cost of MEB Key Elements by Location**

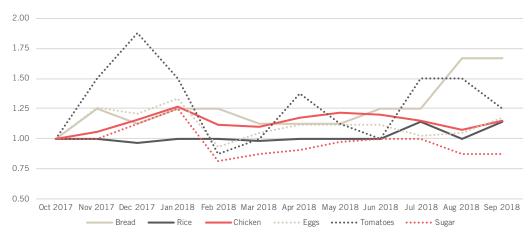


#### PRICES OF MONITORED ITEMS

| Item               | Unit      | Median<br>price (LYD) | Change since<br>Aug 2018 | Change since<br>Oct 2017 |
|--------------------|-----------|-----------------------|--------------------------|--------------------------|
| Food items         |           |                       |                          |                          |
| Peppers            | 1 kg      | 4.75                  | +18.8%                   | +26.7%                   |
| Salt               | 1 kg      | 1.19                  | +18.8%                   | +18.8%                   |
| Tomato paste       | 400 g     | 2.88                  | +15.0%                   | +130.0%                  |
| Rice               | 1 kg      | 4.00                  | +14.3%                   | +14.3%                   |
| Eggs               | 30 eggs   | 12.63                 | +12.2%                   | +17.4%                   |
| Chicken            | 1 kg      | 12.00                 | +6.7%                    | +14.8%                   |
| Flour              | 1 kg      | 3.00                  | +4.3%                    | +100.0%                  |
| Pasta              | 500 g     | 1.56                  | +4.0%                    | -10.9%                   |
| Lamb meat          | 1 kg      | 37.50                 | +2.7%                    | +26.6%                   |
| Beans              | 400 g     | 3.00                  | 0.0%                     | +20.0%                   |
| Bread              | 5 pieces  | 1.67                  | 0.0%                     | +67.0%                   |
| Chickpeas          | 400 g     | 3.00                  | 0.0%                     | +14.3%                   |
| Couscous           | 1 kg      | 4.00                  | 0.0%                     | 0.0%                     |
| Potatoes           | 1 kg      | 2.00                  | 0.0%                     | -33.3%                   |
| Sugar              | 1 kg      | 3.50                  | 0.0%                     | -12.5%                   |
| Vegetable oil      | 1 L       | 6.50                  | 0.0%                     | +73.3%                   |
| Tuna               | 200 g     | 4.38                  | -0.1%                    | +6.1%                    |
| Green tea          | 250 g     | 4.88                  | -2.5%                    | -2.5%                    |
| Black tea          | 250 g     | 7.06                  | -4.2%                    | -5.8%                    |
| Onions             | 1 kg      | 2.13                  | -5.6%                    | +6.3%                    |
| Milk               | 1 L       | 3.69                  | -7.8%                    | -13.2%                   |
| Condensed milk     | 200 ml    | 3.50                  | -12.5%                   | +55.6%                   |
| Tomatoes           | 1 kg      | 2.50                  | -16.7%                   | +25.0%                   |
| Hygiene items      |           |                       |                          |                          |
| Laundry powder     | 1 kg      | 9.00                  | +12.5%                   | +20.0%                   |
| Sanitary pads      | 10 pads   | 4.50                  | +12.5%                   | +16.1%                   |
| Handwashing soap   | 1 bar     | 1.63                  | +8.3%                    | +18.2%                   |
| Shampoo            | 250 ml    | 7.75                  | +3.3%                    | +8.9%                    |
| Baby diapers       | 30 pieces | 21.50                 | -2.3%                    | +7.5%                    |
| Toothpaste         | 100 ml    | 5.00                  | -13.0%                   | -23.1%                   |
| Laundry detergent  | 1 L       | 1.23                  | -18.0%                   | No data                  |
| Toothbrush         | 1 brush   | 2.00                  | -27.3%                   | -11.1%                   |
| Dishwashing liquid | 1 L       | 2.00                  | -33.3%                   | -27.3%                   |
| Other items        |           |                       |                          |                          |
| Bottled water      | 1 L       | 2.00                  | 0.0%                     | No data                  |
| Subsidised LPG     | 11 kg     | 5.00                  | 0.0%                     | No data                  |
| Unsubsidised LPG   | 11 kg     | 10.00                 | -33.3%                   | No data                  |

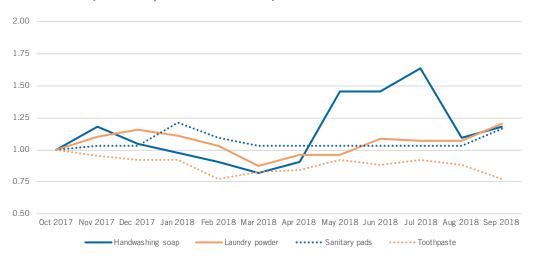
#### **FOOD PRICES OVER TIME**

Selected items (normalised, October 2017 = 1.00)8



#### **HYGIENE ITEM PRICES OVER TIME**

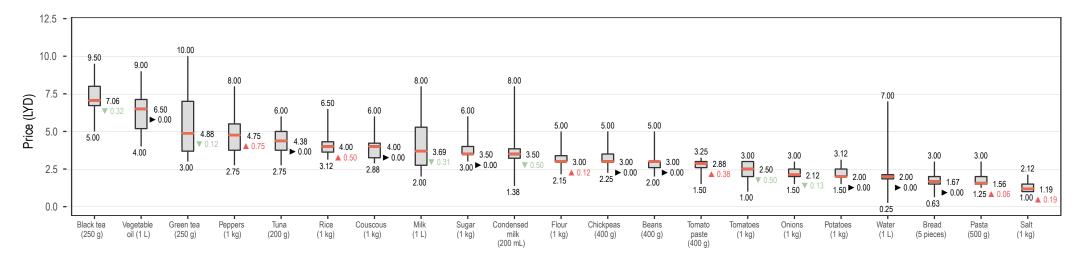
Selected items (normalised, October 2017 = 1.00)8



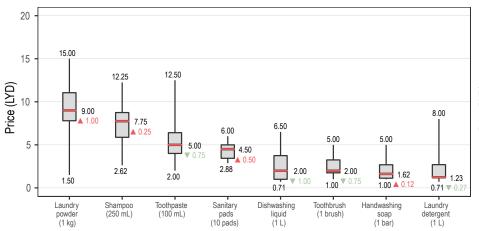


# **Distribution of Prices in Libya**

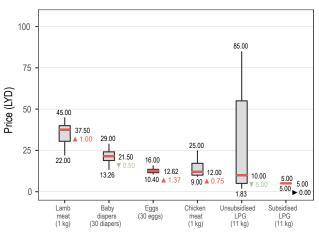
#### **FOOD ITEMS**



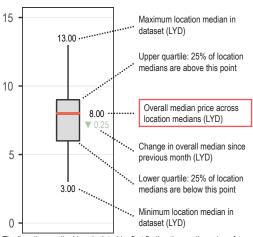
#### **HYGIENE ITEMS**



#### **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.

# **Appendix**

#### PREVIOUS JMMI OUTPUTS **Factsheets Datasets** 2018 August August July July June June Mav Mav April April March March February February January January 2017 December December November November October October September September August August July July June June **Trends Analyses** June-December 2017

#### What is the CMWG?

The Libya Cash & Markets Working Group (CMWG), established in August 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 and co-led by Mercy Corps.

#### 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.

# PAYMENT MODALITIES ACCEPTED IN ASSESSED SHOPS (% of shops) Cash 99% Bank transfer 6% Certified cheque 2% Store credit 1% Credit/debit card 0% Mobile money 60ld Barter 0% Online payments 0% Other modalities 0% MARK-UPS FOR ALTERNATIVE MODALITIES E-cards (credit, debit) N/A Certified cheques 30–50%

identify shops to assess based on the following criteria:

Mobile money

 Shops need to be large enough to sell all or most assessed items.

35%

- 2. Prices in these shops need to be good indicators of the general price levels in the assessed area.
- 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.

#### **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 mahalla); then, REACH calculates the median of this list of medians. All boxplots, as well as 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 2. In cases where no median price is available for an item in a particular location, the median price for that item across the region (west, east or south) is substituted.

#### **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 with 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 middlemarket and upmarket goods are not captured.

#### **Endnotes**

- <sup>1</sup> Due to a lack of data on the price of items in Ghiryan, Aljufrah, and Sirt, missing prices were imputed based on those observed in the nearest assessed city, Azzintan, Brak, and Misrata respectively.
- <sup>2</sup> Amounting to 30 million LYD, flour subsidies were allocated by the government in the east from mid-August in order to tackle high bread prices.
- <sup>3</sup> Retrived from: https://www.libyaherald.com/2018/09/20/serraj-pcgna-sets-currency-tax-at-183-percent-devalues-dinar-to-ld-3-90-per-dollar/
- Official rate: Central Bank of Libya (1 September 2018), retrieved from www.cbl.gov.ly. Parallel market rates: Ewan Libya (1 September 2018), retrieved from www.ewanlibya.ly. The rates from 1 August and 1 September 2018 were used for the calculation of the monthly changes.
- <sup>5</sup> The 'Optional Elements' section of the MEB includes basic expenditures that are incurred by some, but not all, Libyan households, as well as expenditures that extend beyond basic survival and dignity needs. They are not included in the JMMI's MEB calculations.
- <sup>6</sup> The 20% float includes expenses on healthcare, medicine, education, utilities, transportation and communications.
- <sup>7</sup> MEB price index was normalised by setting May 2018 as the baseline and dividing each month's price by the price in May.
- <sup>8</sup> Food and Hygiene prices were normalised by setting October 2017 as the baseline and dividing each month's price by the price in October.
- <sup>9</sup>Trends in flour and bread prices have been analysed from March 2018 onward to capture volatility in recent months.