

# Libya Joint Market Monitoring Initiative (JMMI)

1–10 December 2018

Libya Cash Working Group

**REACH** Informing more effective humanitarian action

## 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 Working Group (CWG) in June 2017. The initiative is guided by the CWG Markets Taskforce, led by REACH and supported by the CWG members. It is funded by OFDA and UNHCR.

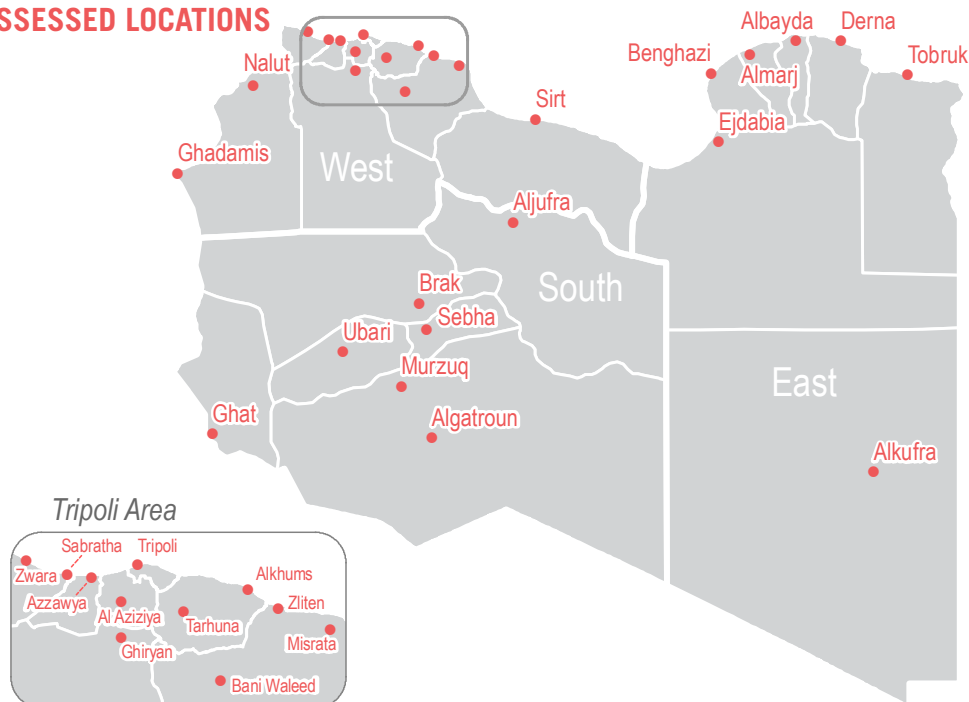
Markets in key urban areas across Libya are assessed on a monthly basis. In each location, field teams record prices and availability of basic food and non-food items (NFI) sold in local shops and markets.

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, cross-checking 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 December, **the value of the Libyan dinar (LYD) appreciated against the US dollar (+10.0%) and the Euro (+9.5%) on the parallel market**, compared to November. Between September and December, the gap between USD/LYD official and parallel market exchange rates narrowed by 30.6%<sup>1</sup>. Since the introduction of economic reforms in mid-September 2018, the increased supply of hard currency has resulted in the appreciation of the LYD<sup>2</sup>. It also allowed merchants to import goods from abroad at a lower price<sup>3</sup>, and consequently to sell products in Libyan shops more cheaply.
- The overall median cost of the MEB** continued to decrease in December, reaching **830.56 LYD**, 10.17 LYD less than in November. The decrease in MEB cost was greatest in the East (-4.1%) and the South (-3.7%), compared to the West (-1.0%).
- In the East, while the median price of cooking fuel (LPG) remained unchanged, food and hygiene items decreased in price, by 4.3% and 2.3% respectively. In the South, the median price of cooking fuel dropped by 13.6% between November and December, notably in Brak. In the West, while food items decreased in price (-2.3%), the median price of LPG and hygiene items rose by 5.0% and 12.3% respectively.
- The overall increase in the price of hygiene items (+8.4%) was driven by prices in the West (+12.2%), which is disproportionately represented in the dataset, while hygiene item prices decreased in the East (-2.3%) and the South (-0.8%).
- In December, while **the median price of bread remained unchanged in the West and the East**, it continued to decrease in the South, marking a 27.0% drop since October. In December 5 pieces of bread cost 1.00 LYD in the East, 1.25 LYD in the West, and 1.46 LYD in the South.

## JMMI KEY FIGURES

Data collection from 1-10 December 2018

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

## EXCHANGE RATES<sup>3</sup>

|   |  |  |
|---|--|--|
| <b>1.399</b><br>USD/LYD<br><i>official</i><br>▲ +0.1% | <b>5.090</b><br>USD/LYD<br><i>parallel market</i><br>▼ -9.1% | <b>5.770</b><br>EUR/LYD<br><i>parallel market</i><br>▼ -8.7% |
|---|--|--|

## KEY MONTHLY CHANGES IN MEB

### Median cost of overall MEB

830.56 LYD ▼ 10.17 LYD -1.2%

| Food items | Hygiene items | Cooking fuel |
|------------|---------------|--------------|
| ▼ -2.1%    | ▲ +8.4%       | ▼ -1.1%      |

## MEDIAN COST OF MEB BY REGION

| Region | Median Cost (LYD) | Change (%) |
|--------|-------------------|------------|
| West   | 801.14 LYD        | -1.0% ▼    |
| East   | 760.38 LYD        | -4.1% ▼    |
| South  | 1045.57 LYD       | -3.7% ▼    |

## 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>4</sup>

|                                   |                     |
|-----------------------------------|---------------------|
| Water (drinking and domestic use) | 2,790 L             |
| Median rent for 3-rm flat         | 1 month             |
| Float <sup>5</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 CWG 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

# 830.56 LYD

Change since November 2018

▼ 10.17 LYD  
(-1.2%)

Change since May 2018

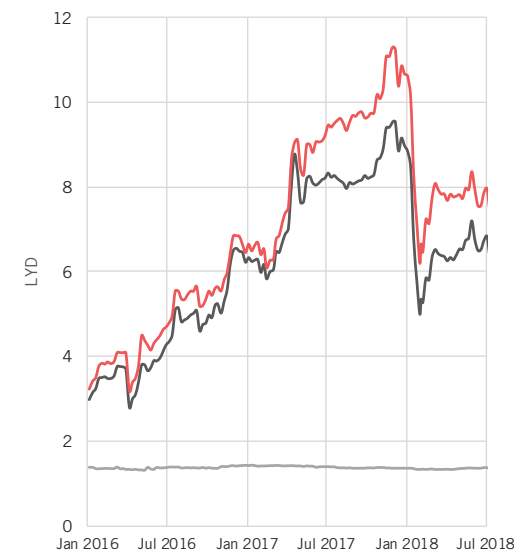
▲ 48.10 LYD  
(+6.1%)

## MEDIAN MEB COST BY LOCATION

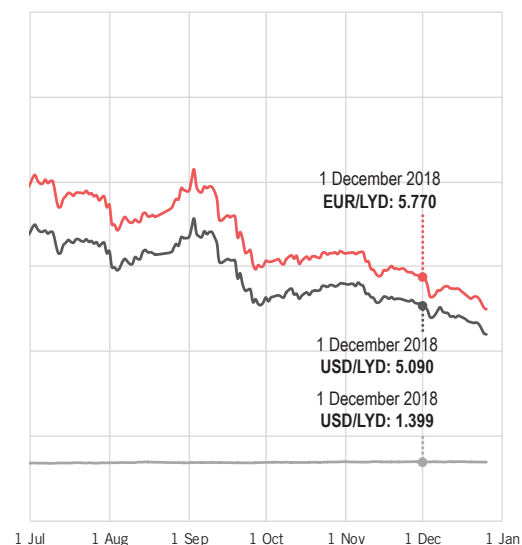
| Location              | Cost of key elements (LYD) | Change since Nov 2018 | Change since May 2018 |
|-----------------------|----------------------------|-----------------------|-----------------------|
| Nalut                 | 837.15                     | -3.7%                 | -3.2%                 |
| Tarhuna               | 833.19                     | -2.8%                 | No data               |
| Zwara                 | 833.04                     | -1.1%                 | +0.7%                 |
| Alkhums               | 824.87                     | +0.5%                 | +15.8%                |
| Sabratha              | 819.43                     | -0.6%                 | +5.6%                 |
| Bani Waleed           | 799.69                     | -3.5%                 | No data               |
| Al Aziziya            | 798.06                     | -2.3%                 | +2.5%                 |
| Azzawya               | 796.03                     | -1.0%                 | +1.3%                 |
| Zliten                | 781.31                     | -2.0%                 | +4.3%                 |
| Ghadamis              | 776.38                     | -14.3%                | +2.6%                 |
| Ghiryan               | 775.50                     | +2.2%                 | +4.4%                 |
| Misrata               | 770.35                     | -8.2%                 | +13.9%                |
| Tripoli               | 766.75                     | -10.1%                | +7.4%                 |
| Sirt                  | 730.19                     | -4.8%                 | +4.7%                 |
| <b>Median West</b>    | <b>801.14</b>              | <b>-1.0%</b>          | <b>+7.8%</b>          |
| Alkufrah              | 979.05                     | -10.7%                | +1.0%                 |
| Almarj                | 790.00                     | +0.1%                 | +0.9%                 |
| Albayda               | 787.75                     | -0.3%                 | -4.3%                 |
| Tobruk                | 786.38                     | -0.8%                 | -1.0%                 |
| Derna                 | 775.56                     | -1.1%                 | -22.3%                |
| Ejdabia               | 748.88                     | -4.8%                 | +9.3%                 |
| Benghazi              | 714.12                     | -4.3%                 | -5.3%                 |
| <b>Median East</b>    | <b>760.38</b>              | <b>-4.1%</b>          | <b>-3.5%</b>          |
| Ghat                  | 1386.75                    | +8.6%                 | +36.1%                |
| Algatroun             | 1311.64                    | -2.9%                 | +16.4%                |
| Murzuq                | 1160.27                    | -4.6%                 | +8.7%                 |
| Ubari                 | 1064.24                    | -8.8%                 | -3.6%                 |
| Aljufra               | 986.63                     | -2.4%                 | +11.8%                |
| Sebha                 | 955.03                     | +0.6%                 | -0.3%                 |
| Brak                  | 876.51                     | -6.5%                 | +2.2%                 |
| <b>Median South</b>   | <b>1045.57</b>             | <b>-3.7%</b>          | <b>+5.5%</b>          |
| <b>Median Overall</b> | <b>830.56</b>              | <b>-1.2%</b>          | <b>+6.1%</b>          |

## EXCHANGE RATES OVER TIME<sup>3</sup>

### January 2016-July 2018



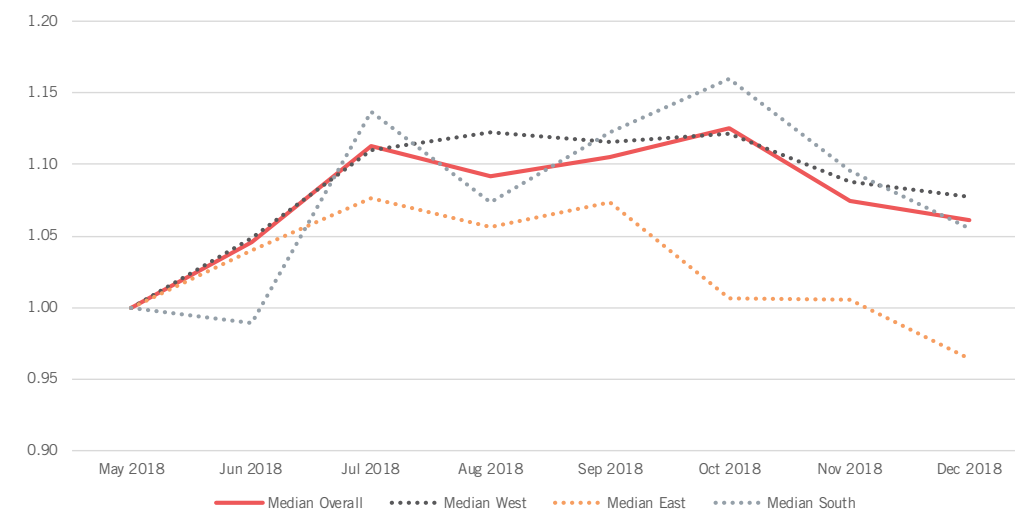
### Since July 2018



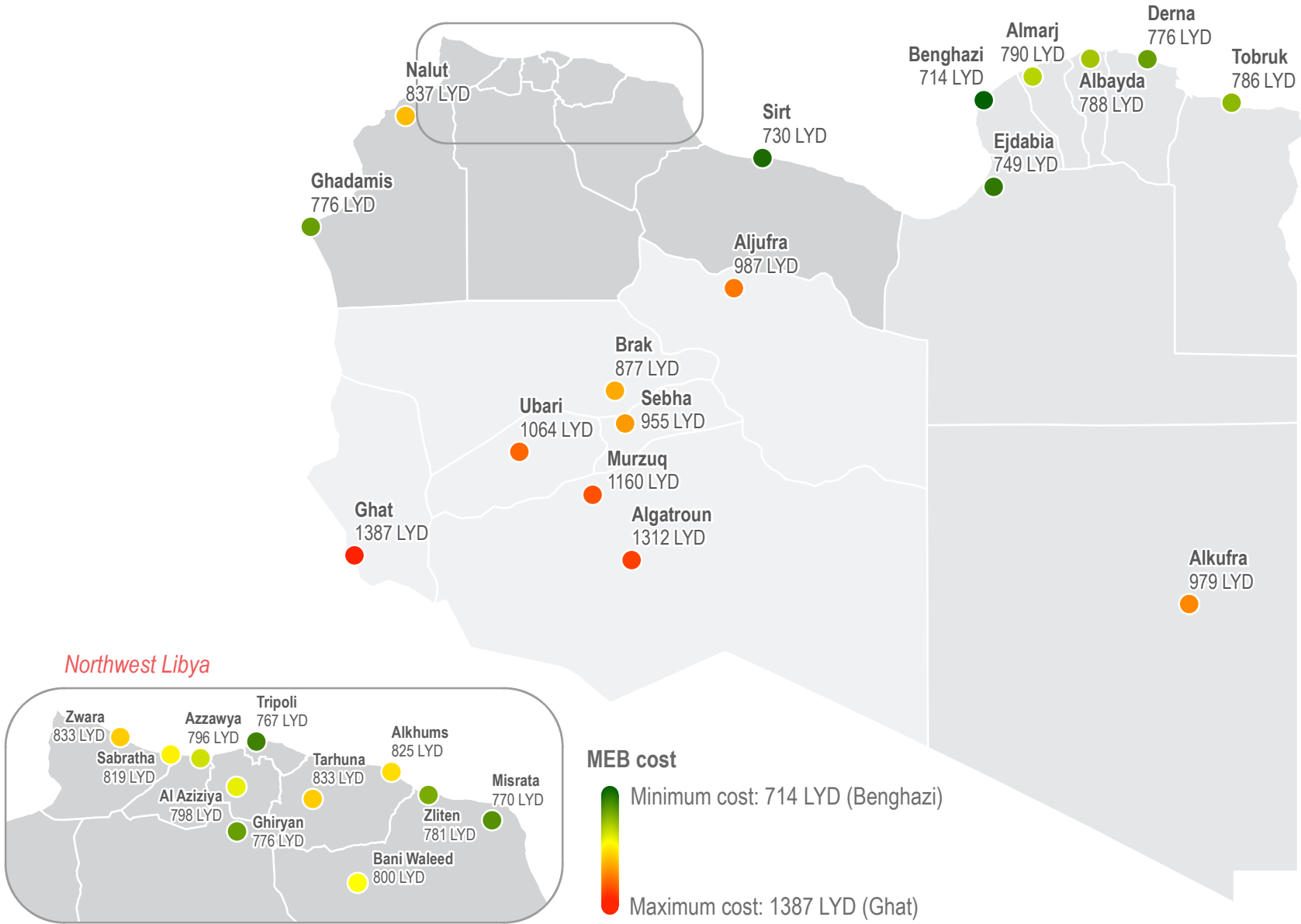
— USD/LYD (parallel market) — USD/LYD (official) — EUR/LYD (parallel market)

## MEB PRICE INDEX

Since May 2018 (normalised, May 2018 = 1.00)<sup>6</sup>



# Cost of MEB Key Elements by Location

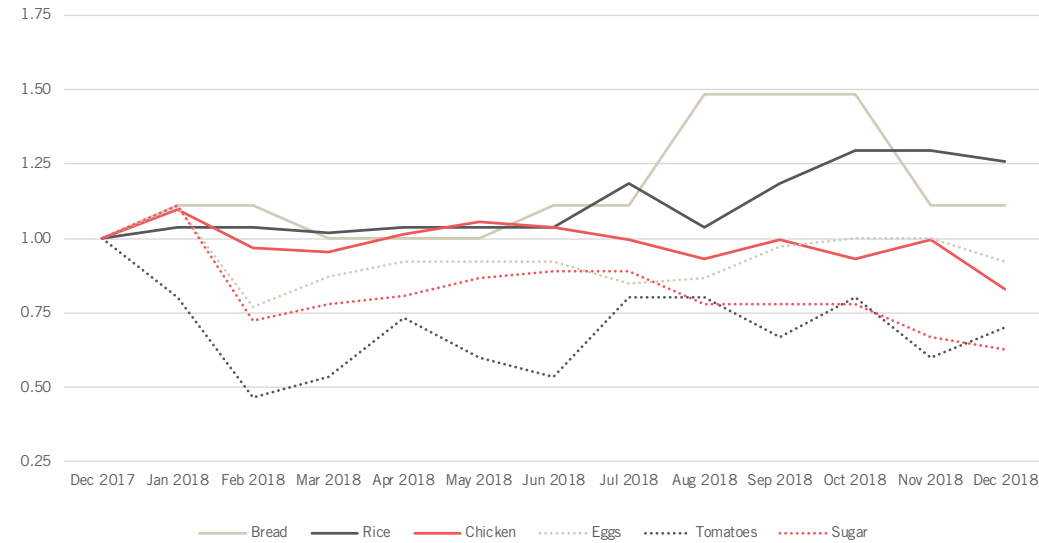


## PRICES OF MONITORED ITEMS

| Item                 | Unit      | Median price (LYD) | Change since Nov 2018 | Change since Dec 2017 |
|----------------------|-----------|--------------------|-----------------------|-----------------------|
| <b>Food items</b>    |           |                    |                       |                       |
| Tomatoes             | 1 kg      | 2.63               | +16.7%                | -30.0%                |
| Peppers              | 1 kg      | 5.00               | +11.1%                | +11.1%                |
| Tuna                 | 200 g     | 4.69               | +10.3%                | -0.6%                 |
| Vegetable oil        | 1 L       | 5.50               | +4.8%                 | +57.1%                |
| Milk                 | 1 L       | 3.13               | +4.2%                 | -21.9%                |
| Bread                | 5 pieces  | 1.25               | 0.0%                  | +11.1%                |
| Green tea            | 250 g     | 5.00               | 0.0%                  | -7.0%                 |
| Onions               | 1 kg      | 2.00               | 0.0%                  | -33.3%                |
| Potatoes             | 1 kg      | 2.00               | 0.0%                  | -22.0%                |
| Salt                 | 1 kg      | 1.00               | 0.0%                  | 0.0%                  |
| Tomato paste         | 400 g     | 2.88               | 0.0%                  | +130.0%               |
| Beans                | 400 g     | 2.94               | -2.1%                 | +14.6%                |
| Chickpeas            | 400 g     | 2.94               | -2.1%                 | 0.0%                  |
| Rice                 | 1 kg      | 4.25               | -2.9%                 | +25.9%                |
| Lamb meat            | 1 kg      | 35.75              | -3.4%                 | -0.7%                 |
| Flour                | 1 kg      | 2.88               | -4.2%                 | +43.8%                |
| Couscous             | 1 kg      | 3.75               | -6.3%                 | -6.3%                 |
| Sugar                | 1 kg      | 2.81               | -6.3%                 | -37.5%                |
| Pasta                | 500 g     | 1.52               | -6.8%                 | +1.0%                 |
| Eggs                 | 30 eggs   | 12.00              | -7.7%                 | -7.7%                 |
| Black tea            | 250 g     | 7.25               | -9.4%                 | +10.5%                |
| Condensed milk       | 200 ml    | 2.72               | -9.5%                 | +8.6%                 |
| Chicken              | 1 kg      | 10.00              | -16.7%                | -17.1%                |
| <b>Hygiene items</b> |           |                    |                       |                       |
| Handwashing soap     | 1 bar     | 2.00               | +33.3%                | +39.1%                |
| Toothbrush           | 1 brush   | 3.00               | +33.3%                | +20.0%                |
| Laundry detergent    | 1 L       | 1.55               | +24.0%                | No data               |
| Toothpaste           | 100 ml    | 5.67               | +6.3%                 | -5.6%                 |
| Shampoo              | 250 ml    | 6.13               | +2.1%                 | +0.7%                 |
| Sanitary pads        | 10 pads   | 4.17               | -4.8%                 | +4.1%                 |
| Baby diapers         | 30 pieces | 19.00              | -5.0%                 | -16.7%                |
| Laundry powder       | 1 kg      | 6.90               | -11.0%                | -20.7%                |
| Dishwashing liquid   | 1 L       | 2.58               | -14.2%                | -20.8%                |
| <b>Other items</b>   |           |                    |                       |                       |
| Bottled water        | 1 L       | 0.29               | 0.0%                  | No data               |
| Unsubsidised LPG     | 11 kg     | 8.25               | -17.5%                | No data               |
| Subsidised LPG       | 11 kg     | 1.83               | -39.0%                | No data               |

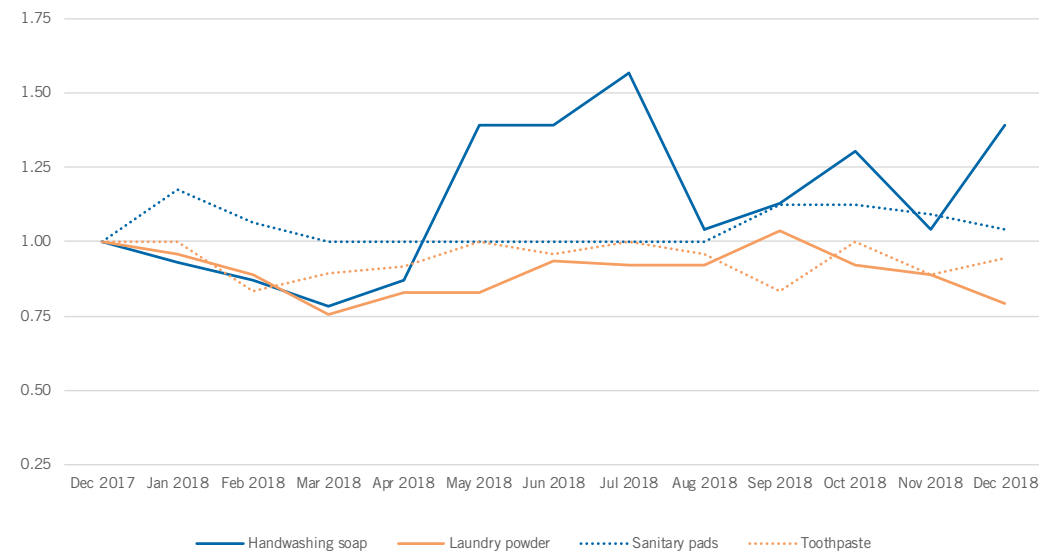
## FOOD PRICES OVER TIME

Selected items (normalised, December 2017 = 1.00)<sup>7</sup>



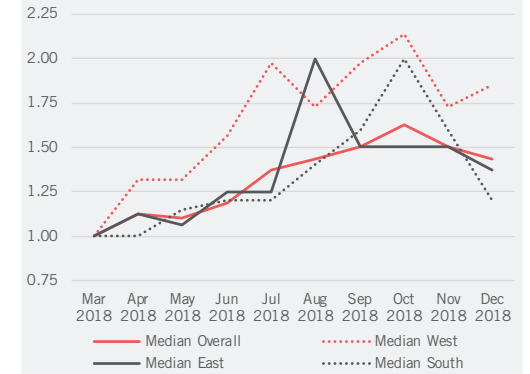
## HYGIENE ITEM PRICES OVER TIME

Selected items (normalised, December 2017 = 1.00)<sup>7</sup>



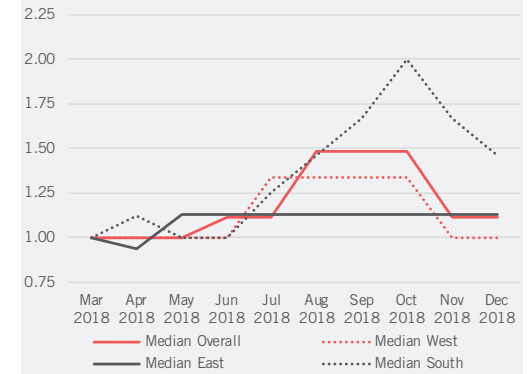
## FLOUR PRICES OVER TIME<sup>8</sup>

(normalised, March 2018 = 1.00)



## BREAD PRICES OVER TIME<sup>8</sup>

(normalised, March 2018 = 1.00)



## NOTABLE MONTH-ON-MONTH CHANGES

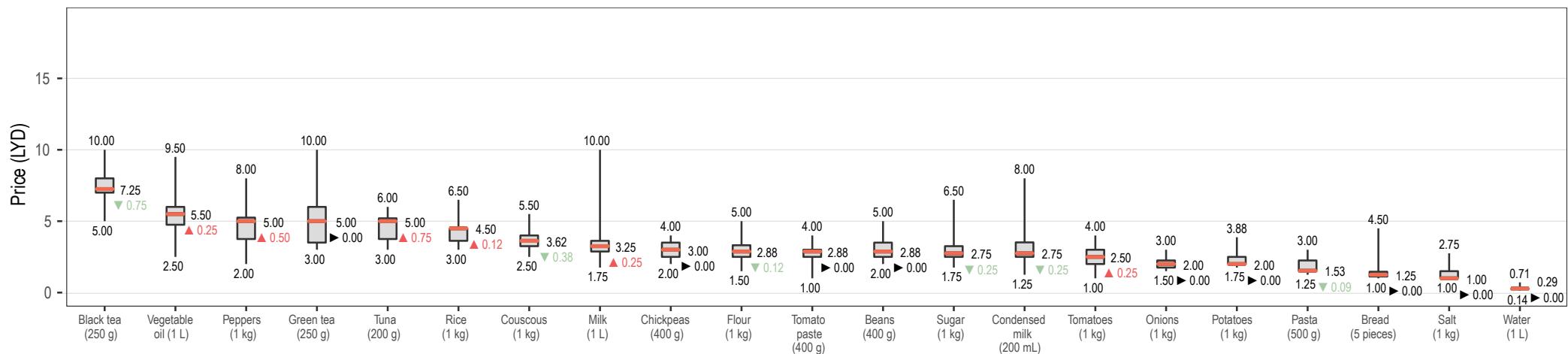
|                   |          |
|-------------------|----------|
| Handwashing soap  | ▲ +33.3% |
| Toothbrush        | ▲ +33.3% |
| Laundry detergent | ▲ +24.0% |
| Unsubsidised LPG  | ▼ -17.5% |
| Subsidised LPG    | ▼ -39.0% |

## MARKET SHORTAGES

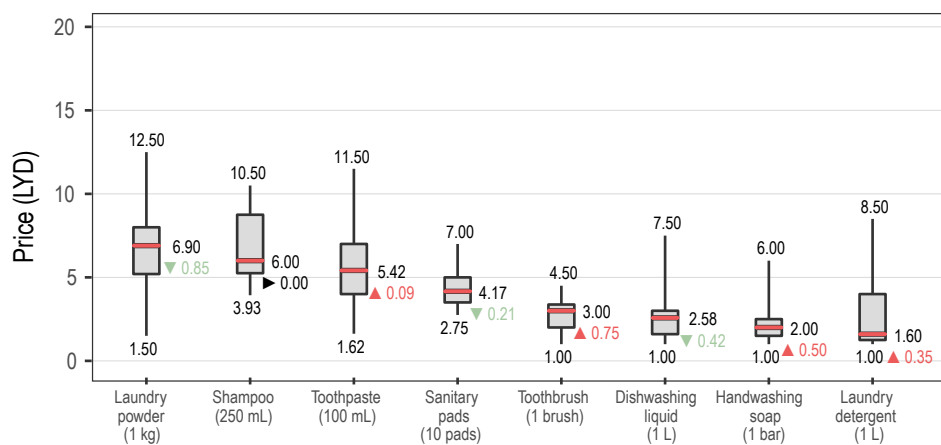
None reported

# Distribution of Prices in Libya

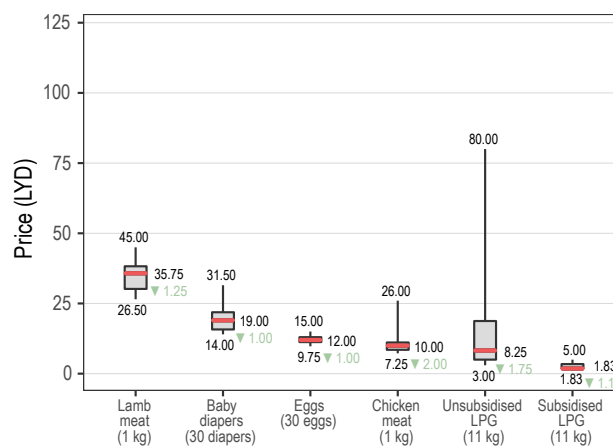
## FOOD ITEMS



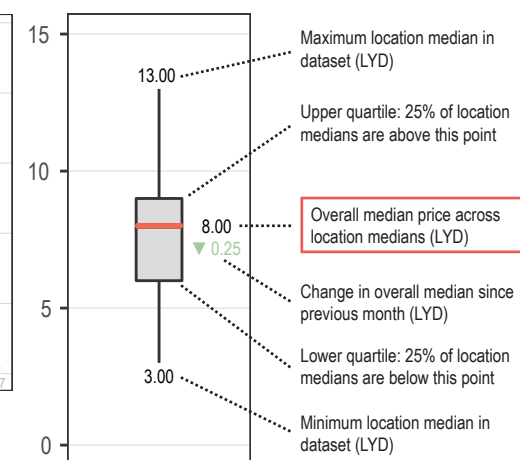
## HYGIENE ITEMS



## 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.

## PREVIOUS JMMI OUTPUTS

### Factsheets

### Datasets

#### 2018

|           |           |
|-----------|-----------|
| November  | November  |
| October   | October   |
| September | September |
| August    | August    |
| July      | July      |
| June      | June      |
| May       | May       |
| April     | April     |
| March     | March     |
| February  | February  |
| January   | January   |

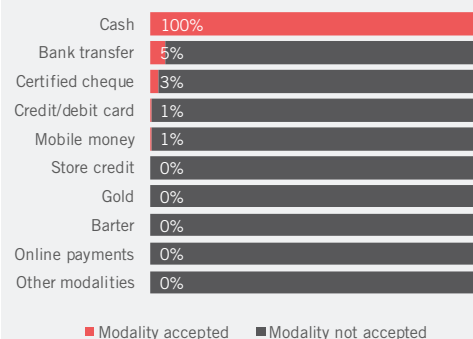
#### 2017

|           |           |
|-----------|-----------|
| December  | December  |
| November  | November  |
| October   | October   |
| September | September |
| August    | August    |
| July      | July      |
| June      | June      |

### Trends Analyses

January–June 2018  
June–December 2017

## PAYMENT MODALITIES ACCEPTED IN ASSESSED SHOPS (% of shops)



## MARK-UPS FOR ALTERNATIVE MODALITIES

|                         |        |
|-------------------------|--------|
| E-cards (credit, debit) | 0-40%  |
| Certified cheques       | 10-40% |
| Mobile money            | 0%     |

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 CWG, 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 CWG 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 CWG 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 middle-market and upmarket goods are not captured.

## Endnotes

<sup>1</sup> In September 2018, the USD/LYD gap between official and parallel market exchange rates was 5.322 LYD (retrieved from the [September JMMI factsheet](#)) against a gap of 3.691 LYD in December.

<sup>2</sup> Libya Humanitarian Access Team Monthly Report: November 2018, p.4.

<sup>3</sup> For further details, see: <https://www.libyaherald.com/2018/12/04/libyan-dinar-gains-value-as-economic-reforms-take-effect/>

<sup>3</sup> Official rate: Central Bank of Libya (1 December 2018), retrieved from [www.cbl.gov.ly](http://www.cbl.gov.ly). Parallel market rates: Ewan Libya (1 December 2018), retrieved from [www.ewanlibya.ly](http://www.ewanlibya.ly). The rates from 1 November and 1 December 2018 were used for the calculation of the monthly changes.

<sup>4</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>5</sup> The 20% float includes expenses on healthcare, medicine, education, utilities, transportation, and communications.

<sup>6</sup> The MEB price index was normalised by setting May 2018 as the baseline and dividing each month's price by the price in May.

<sup>7</sup> The food and hygiene prices were normalised by setting December 2017 as the baseline and dividing each month's price by the price in December.

<sup>8</sup> Trends in flour and bread prices have been analysed from March 2018 onward to capture volatility that began roughly around that time.