

# Libya Joint Market Monitoring Initiative (JMMI)

1–10 October 2018

Libya Cash & Markets 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 & 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.

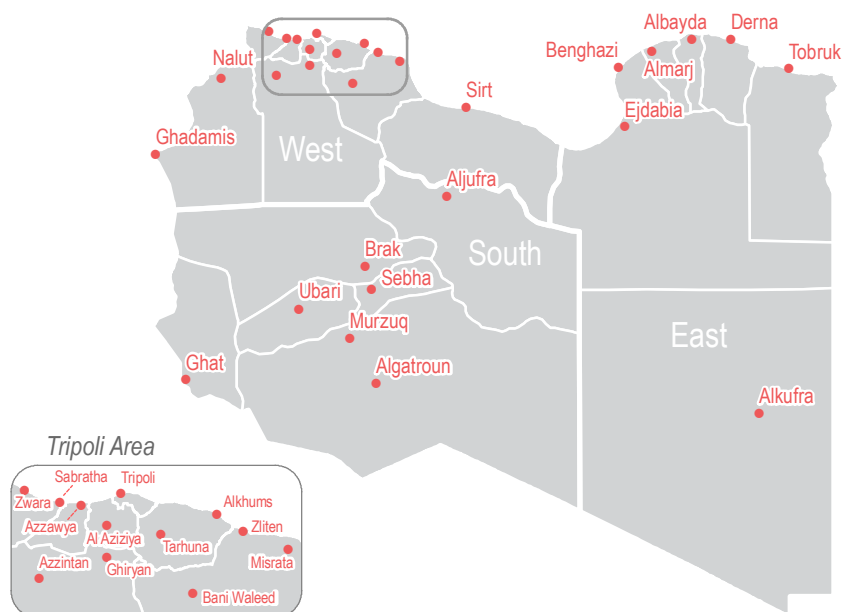
Markets in key urban areas across Libya are assessed on a monthly basis. In each location, field teams record prices and availability of basic food and non-food items (NFI) sold in local shops and markets.

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, 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

- Following the new tax on foreign currency transactions imposed since 19 September 2018, **the value of the Libyan dinar appreciated against the US dollar on the parallel market, a rise by 26.9%** from September to October.
- This appreciation was not accompanied by an overall decrease of the median cost of the **Minimum Expenditure Basket (MEB)**, which reached **880.78 LYD in October**.<sup>1</sup> Despite decreasing median prices in the east (-6.2%) due in part to decreasing median prices of peppers (-30.0%) and potatoes (-20.0%), the overall cost of the MEB slightly increased by 1.8% compared to September. Additionally, while the overall median price of food items and cooking fuel (LPG) remained relatively unchanged in October, the overall median price of hygiene items rose by 18.9%. According to KIs, merchants tend to test new brands of hygiene items, which leads to a high volatility in prices.
- In October, **the median price of bread remained at 1.67 LYD per 5 pieces**. Due to sporadic flour subsidies by the government to tackle high bread prices, strong variations depending on the city assessed continued accordingly.<sup>2</sup> The greatest increases were in the eastern part of Libya in Derna (+376.2%) and Mursuq (+274.3%).
- The overall median price of LPG was stable between September and October**, with a median cost of 10 LYD per 11 kg across Libya. However, strong variations in prices were noticed, notably in the west (-31.0%) and the south (+27.3%). Additionally, following the end of clashes in Tripoli<sup>3</sup>, the reopening of roads from Tripoli allowed the supply of LPG to start again in the neighbouring cities, which led to a decrease in median price accordingly, most notably in Al Aziziya (-61.3%) and Azzawya (-92.9%).

## JMMI KEY FIGURES

Data collection from **1-10 October 2018**

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

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

<b>1.385</b> USD/LYD <i>official</i> ▶ +0.5%	<b>5.280</b> USD/LYD <i>parallel market</i> ▼ -21.2%	<b>6.150</b> EUR/LYD <i>parallel market</i> ▼ -21.1%
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## KEY MONTHLY CHANGES IN MEB

Median cost of overall MEB

**880.78 LYD** ▲ **15.82 LYD** +1.8%

<b>Food items</b> ▲ +0.4%	<b>Hygiene items</b> ▲ +18.9%	<b>Cooking fuel</b> ▶ 0.0%
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## MEDIAN COST OF MEB BY REGION

<b>West</b>	833.51 LYD	+0.4% ▲
<b>East</b>	793.75 LYD	-6.2% ▼
<b>South</b>	1149.55 LYD	+3.3% ▲

## 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 880.78 LYD

Change since  
September 2018  
**▲ 15.82 LYD**  
(+1.8%)

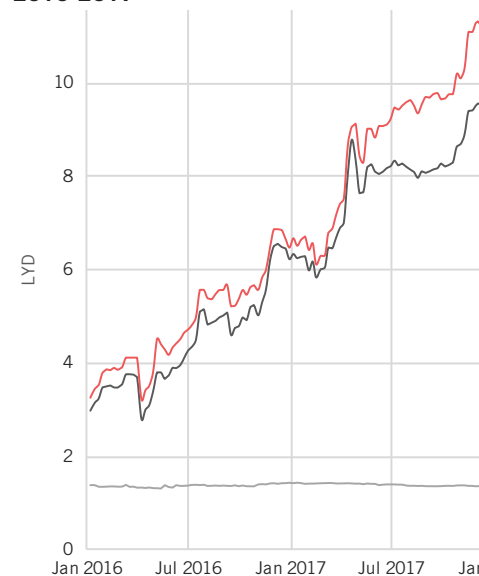
Change since  
May 2018  
**▲ 98.32 LYD**  
(+12.6%)

## MEDIAN MEB COST BY LOCATION

Location	Cost of key elements (LYD)	Change since Sep 2018	Change since May 2018
Zliten	932.39	+23.2%	+24.5%
Nalut	914.03	-4.4%	+5.7%
Ghadamis	890.88	-6.0%	+11.8%
Al Aziziya	890.31	-11.3%	+14.3%
Zwara	885.21	-14.3%	+7.0%
Sirt	877.55	+5.9%	+25.9%
Tripoli	861.98	+4.6%	+20.7%
Tarhuna	859.34	+5.6%	No data
Sabratha	853.72	-12.3%	+10.0%
Azzawya	831.27	-17.3%	+5.8%
Alkhums	810.68	-5.2%	+13.8%
Bani Waleed	799.21	+3.9%	No data
Azzintan	779.17	-2.4%	+6.7%
Misrata	766.10	-7.1%	+13.3%
Ghiryan	737.50	-3.3%	-0.7%
<b>Median West</b>	<b>833.51</b>	<b>+0.4%</b>	<b>+12.1%</b>
Alkufra	1068.53	+0.2%	+10.3%
Derna	973.92	+10.0%	-2.5%
Benghazi	834.07	-5.7%	+10.6%
Tobruk	814.56	-6.2%	+2.6%
Almarj	801.75	-6.8%	+2.4%
Albayda	801.31	-5.4%	-2.6%
Ejdabia	716.38	-10.3%	+4.5%
<b>Median East</b>	<b>793.75</b>	<b>-6.2%</b>	<b>+0.7%</b>
Murzuq	1529.92	+36.6%	+43.3%
Ubari	1278.11	+5.4%	+15.8%
Algatroun	1251.49	+4.1%	+11.1%
Ghat	1248.50	-3.1%	+22.5%
Brak	1109.59	+18.5%	+29.4%
Aljufra	996.13	-7.1%	+12.9%
Sebha	979.71	+6.4%	+2.3%
<b>Median South</b>	<b>1149.55</b>	<b>+3.3%</b>	<b>+16.0%</b>
<b>Median Overall</b>	<b>880.78</b>	<b>+1.8%</b>	<b>+12.6%</b>

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

### 2016-2017

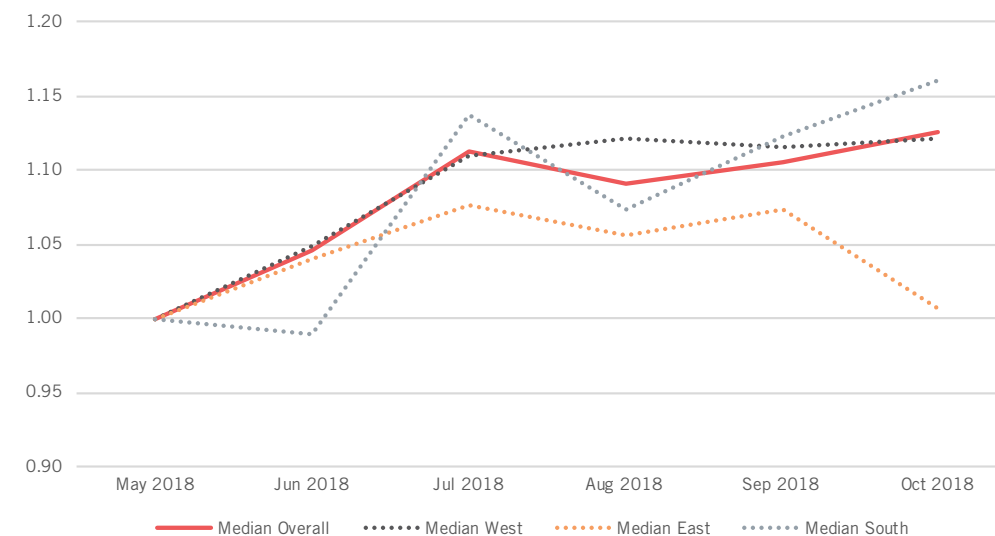


### Since January 2018

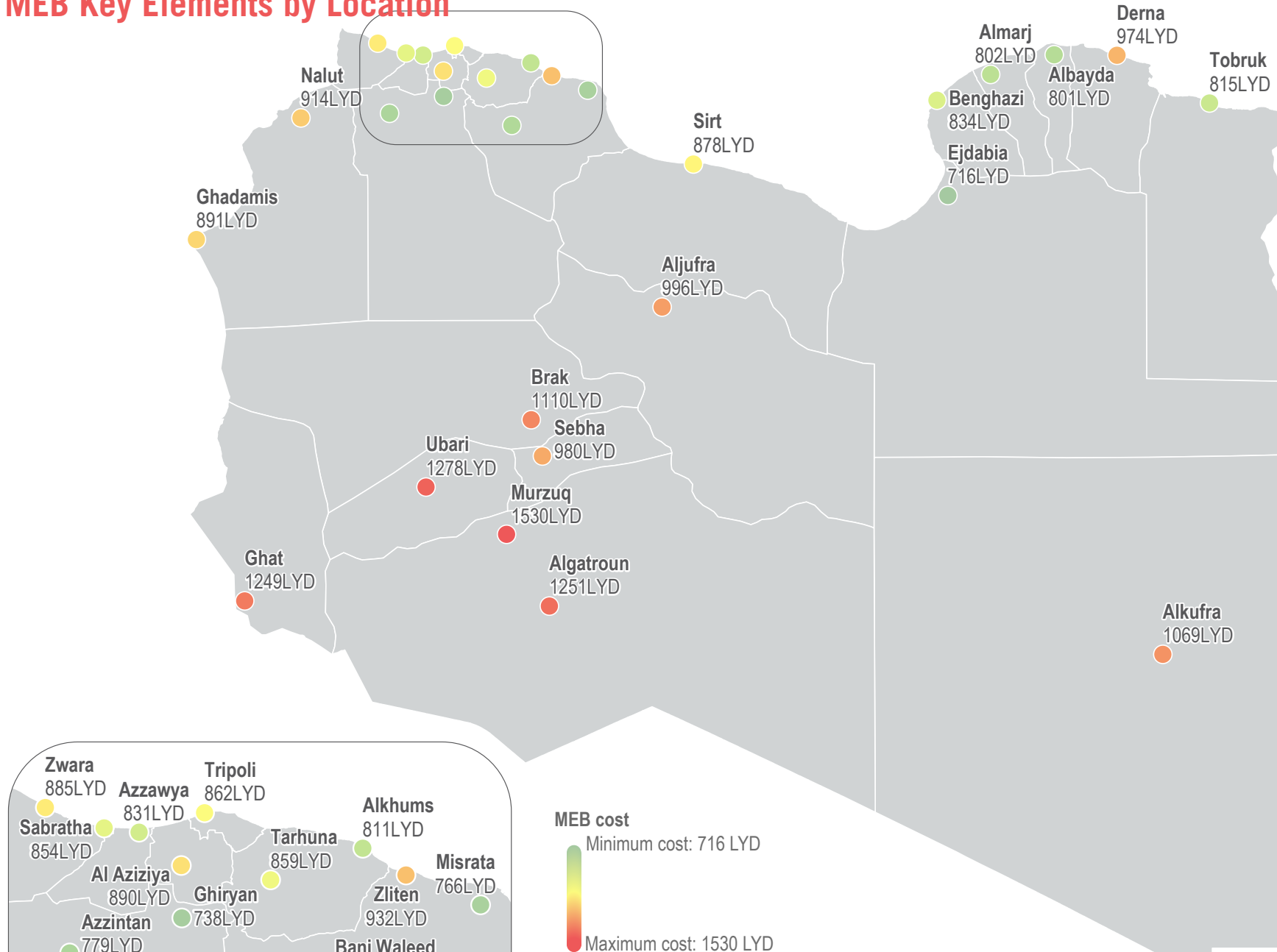


## MEB PRICE INDEX

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



# Cost of MEB Key Elements by Location

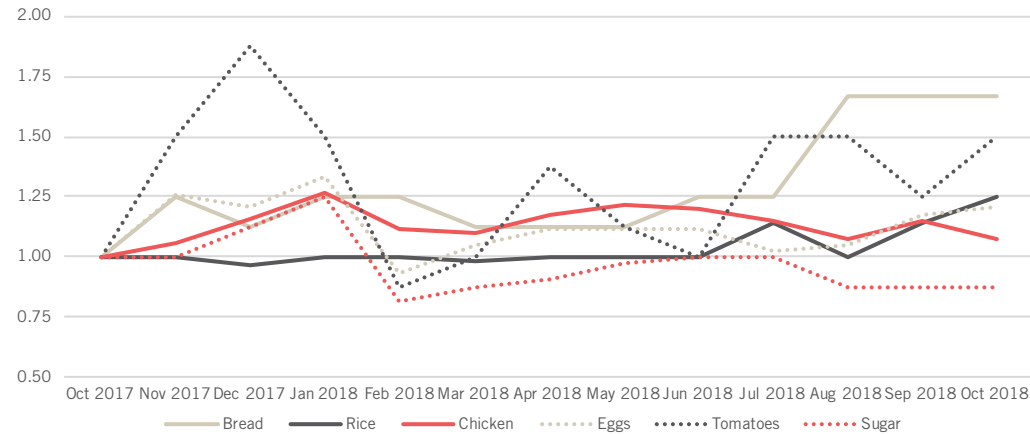


## PRICES OF MONITORED ITEMS

Item	Unit	Median price (LYD)	Change since Sep 2018	Change since Oct 2017
<b>Food items</b>				
Tomatoes	1 kg	3.00	+20.0%	+50.0%
Black tea	250 g	8.00	+13.3%	+6.7%
Rice	1 kg	4.38	+9.4%	+25.0%
Flour	1 kg	3.25	+8.3%	+116.7%
Onions	1 kg	2.25	+5.9%	+12.5%
Peppers	1 kg	5.00	+5.3%	+33.3%
Tomato paste	400 g	3.00	+4.3%	+140.0%
Eggs	30 eggs	13.00	+3.0%	+20.9%
Lamb meat	1 kg	38.50	+2.7%	+30.0%
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%
Pasta	500 g	1.56	0.0%	-10.9%
Potatoes	1 kg	2.00	0.0%	-33.3%
Sugar	1 kg	3.50	0.0%	-12.5%
Tuna	200 g	4.25	-2.9%	+3.0%
Chicken	1 kg	11.25	-6.3%	+7.7%
Green tea	250 g	4.50	-7.7%	-10.0%
Condensed milk	200 ml	3.12	-10.9%	+38.7%
Milk	1 L	3.25	-11.9%	-23.5%
Salt	1 kg	1.00	-15.8%	0.0%
Vegetable oil	1 L	5.25	-19.2%	+40.0%
<b>Hygiene items</b>				
Dishwashing liquid	1 L	2.75	+37.5%	0.0%
Toothbrush	1 brush	2.50	+25.0%	+11.1%
Toothpaste	100 ml	6.00	+20.0%	-7.7%
Handwashing soap	1 bar	1.88	+15.4%	+36.4%
Laundry detergent	1 L	1.38	+11.8%	No data
Sanitary pads	10 pads	4.50	0.0%	+16.1%
Baby diapers	3 pieces	20.00	-7.0%	0.0%
Shampoo	250 ml	7.00	-9.7%	-1.6%
Laundry powder	1 kg	8.00	-11.1%	+6.7%
<b>Other items</b>				
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	0.0%	No data

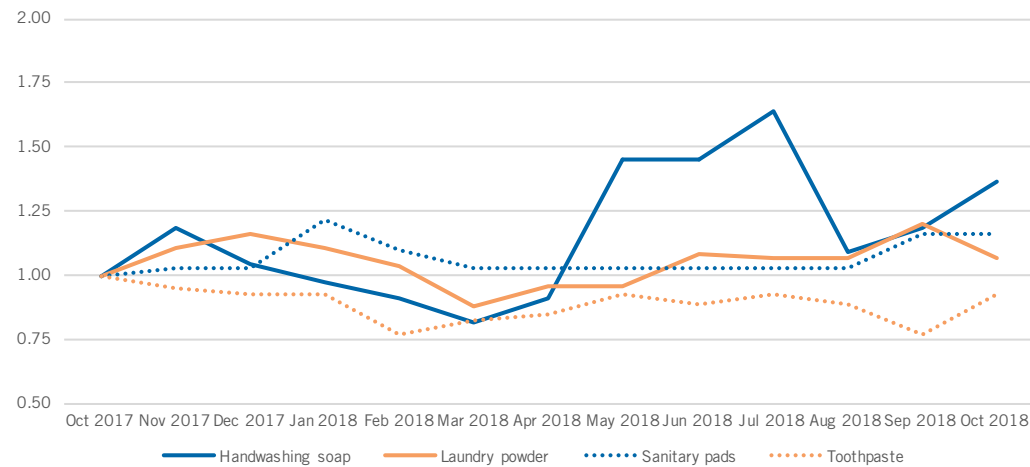
## FOOD PRICES OVER TIME

Selected items (normalised, October 2017 = 1.00)<sup>8</sup>



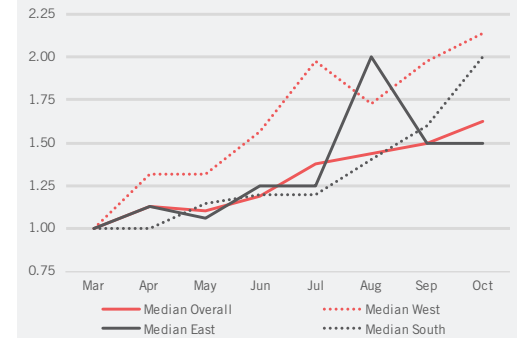
## HYGIENE ITEM PRICES OVER TIME

Selected items (normalised, October 2017 = 1.00)<sup>8</sup>



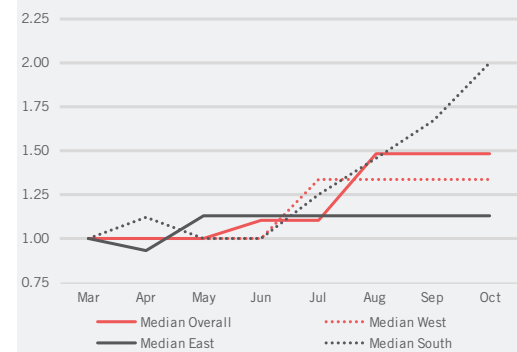
## FLOUR PRICES OVER TIME<sup>9</sup>

(normalised, March 2018 = 1.00)



## BREAD PRICES OVER TIME<sup>9</sup>

(normalised, March 2018 = 1.00)



## NOTABLE MONTH-ON-MONTH CHANGES

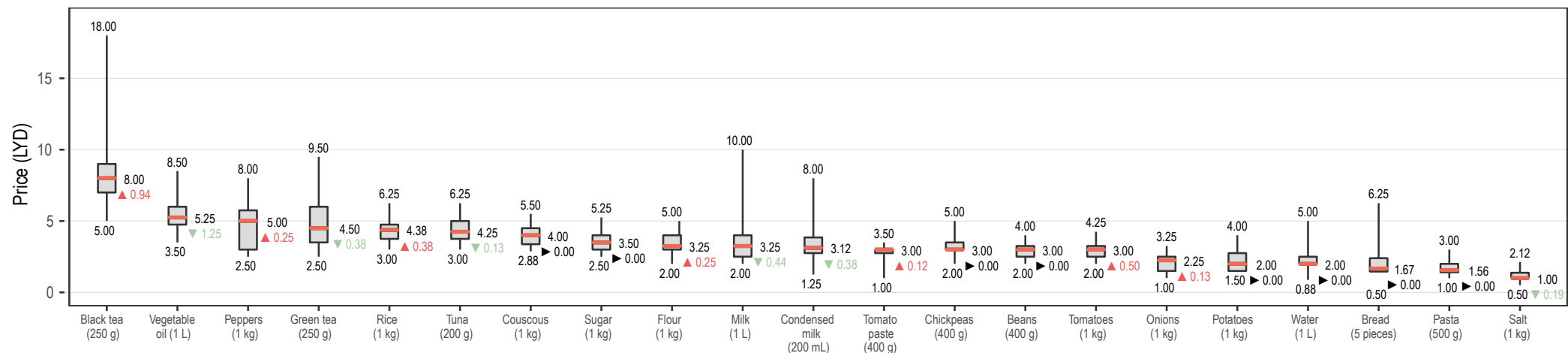
Dishwashing liquid	▲ +37.5%
Toothbrush	▲ +25.0%
Bottled water	▲ +23.1%
Tomatoes	▲ +20.0%
Vegetable oil	▼ -19.2%

## MARKET SHORTAGES

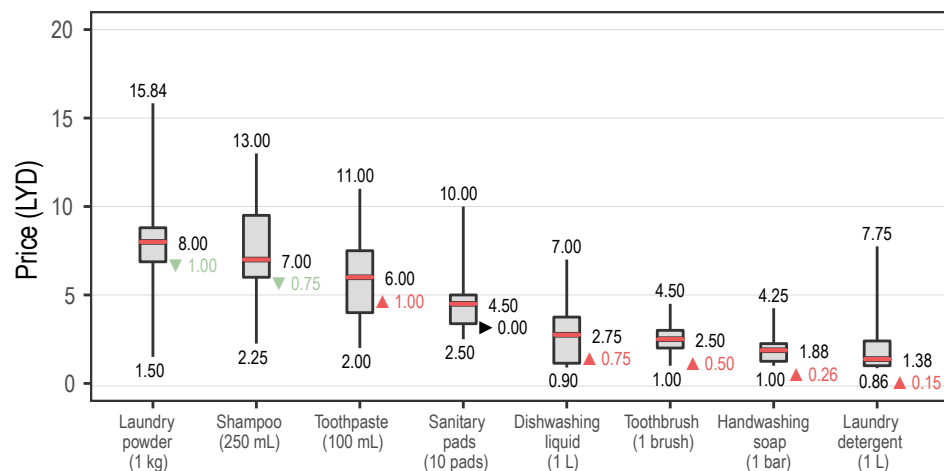
None reported

# Distribution of Prices in Libya

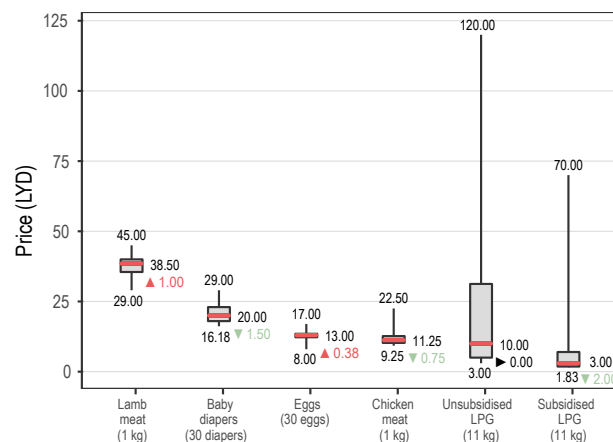
## FOOD ITEMS



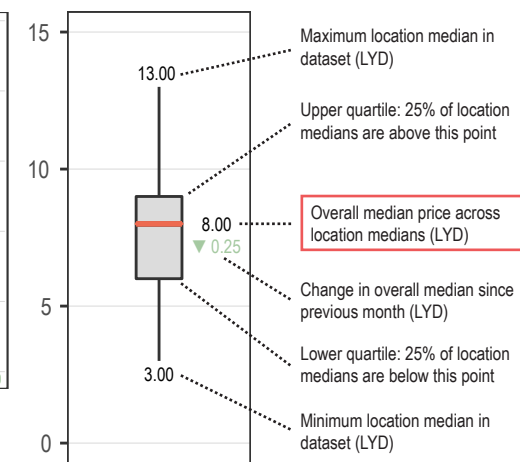
## HYGIENE ITEMS



## 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

#### 2018

September  
August  
July  
June  
May  
April  
March  
February  
January

### Datasets

September  
August  
July  
June  
May  
April  
March  
February  
January

#### 2017

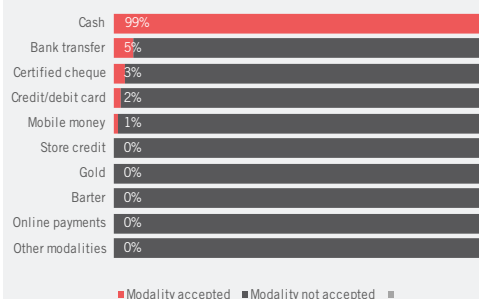
December  
November  
October  
September  
August  
July  
June

December  
November  
October  
September  
August  
July  
June

### Trends Analyses

June–December 2017  
January-June 2018

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



## MARK-UPS FOR ALTERNATIVE MODALITIES

E-cards (credit, debit)	30-40%
Certified cheques	20-40%
Mobile money	20%

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.

## 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> Due to a lack of data on the price of cooking fuel (LPG) in Ghadamis and Azzintan, missing prices were imputed based on those observed in the nearest assessed city, Nalut and Ghiryan respectively.

<sup>2</sup> Retrieved from: <https://www.libyaherald.com/2018/07/06/serraj-pc-to-allocate-ld-30-million-to-flour-mills-to-resolve-bread-shortage/>

<sup>3</sup> For further details, please refer to the September JMMI factsheet: <http://bit.ly/2P6UT3y>

<sup>4</sup> Official rate: Central Bank of Libya (1 October 2018), retrieved from [www.cbl.gov.ly](http://www.cbl.gov.ly). Parallel market rates: Ewan Libya (1 October 2018), retrieved from [www.ewanlibya.ly](http://www.ewanlibya.ly). The rates from 1 September and 1 October 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.