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

1 - 8 February 2020

### INTRODUCTION

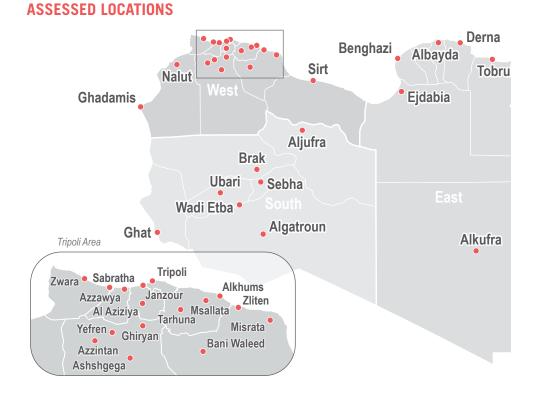
In an effort to inform cash-based interventions and better understand market dynamics in Libya, the Joint Market Monitoring Initiative (JMMI) was created by the Libya Cash Working Group (CWG) in June 2017. The initiative is guided by the CWG Markets Taskforce, led by REACH and supported by the CWG members. 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 (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.
- 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 the MEB in each assessed market.
- · More details are available in the Methodology section of the Appendix.



### Libya Cash Working Group

# REACH Informing more effective humanitarian action

### **KEY FINDINGS**

- · Unofficial Liquified Petroleum Gas (LPG) prices in south Libya have doubled since January 2020. The median price in the south of Libya for an 11-kg cylinder is 85 LYD, with some cities (Algatroun and Ghat) reaching up to 100 LYD. LPG prices in the west have increased by 21% from January to February 2020, adding up to a 114% increase from December 2019 to February 2020. However, there has been a 33% drop in LPG prices in the east. Overall in Libya, unofficial LPG prices in February 2020 were 350% more expensive than in January 2019.
- · Fuel shortages can be attributed to the oil blockade implemented by eastern authorities on the 17th January.1 As of 18th February, Libyan oil production fell to 123,537 barrels per day (bpd) from 1.13 million in December 2019.2 Consequently Libya's largest oil refinery in Azzawaya stopped operating due to a lack of crude oil.3 This may have effected the supply of fuel to west and south Libyan markets, despite Libya's oil refining capacity only accounting for 25% of domestic fuel consumption.4
- · Fuel shortages mean that the population will have less access to subsidised fuel and must rely more on parallel markets. Additionally, many power stations are struggling to operate due to an insufficient supply of gas/ fuel. This may lead to a greater number of power cuts in Libya.5
- · Some eastern cities have witnessed spikes in the cost of the food portion of the MEB. For example, the MEB's food portion has increased by 19.9% in Tobruk, 14.5% in Albayda, and 12.4% in Ejdabia. Cities in west Libya have also experienced similar increases in the cost of the food portion of the MEB, such as Tarhuna (11.9%), Zliten (10.2%) and Bani Waleed (9.7%). This may be attributed to the recent rise in the parallel market exchange rate, where the USD/LYD rate has risen by 10.9% from December 2019 to February 2020.
- The General Authority for Communication and Informatics has announced that all affiliated communications companies shall decrease internet service prices by 50% from the beginning of March 2020.6

### **JMMI KEY FIGURES**

Data collection from 1 - 8 February 2020

- 4 participating agencies (ACTED, DRC, REACH, WFP)
- 32 assessed cities
- 34 assessed items
- 460 assessed shops

### **EXCHANGE RATES**<sup>7</sup>

4.370 1.404 **USD/LYD EUR/LYD** USD/LYD official parallel market parallel market **▲** +0.5% **▲** +6.1% **+**2.6%

4.650

### **KEY MONTHLY CHANGES IN MEB**

#### Median cost of overall MEB

705.72 LYD ▲ 6.95 LYD **1.0%** 

Food items Hygiene items Cooking fuel 8

**▲** 1.6% **▼** -9.8% **+** +16.3%

### MEDIAN COST OF MEB BY REGION

687.53 LYD +2.0% West 691.62 LYD +3.9% East 906.04 LYD +2.9% A South

### **MARKET SHORTAGES**

 Fuel shortages reported in the west and south Libya

Reported changes are month-on-month

### 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>10</sup>

Water (drinking and

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

Float11 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**

705.72 LYD

Change since January 2020 ▲ 6.95 LYD (+1.0%)

Change since January 2019 ▼ 64.38 LYD (-8.4%)

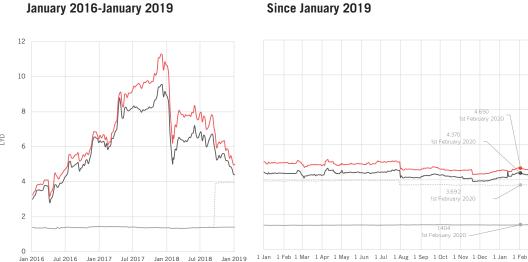
### MEDIAN MEB COST BY LOCATION

Location	Cost of MEB (LYD)	Since Jan 2020	Since Jan 2019	
Ghiryan	821.9	5.9%	11.4%	
Nalut	799.6	-1.4%	-0.7%	
Ghadamis	772.5	No data	6.4%	
Ashshgega	730.5	3.2%	No data*	
Azzintan	728.0	-4.6%	-2.8%	
Yefren	713.2	1.3%	No data*	
Bani Waleed	707.6	11.9%	-0.5%	
Tripoli	706.2	-0.6%	-6.9%	
Msallata	703.1	2.2%	No data*	
Zliten	702.2	10.4%	-1.0%	
Tarhuna	691.6	10.8%	-3.4%	
Sirt	672.8	7.6%	-4.1%	
Janzour	666.8	-0.3%	No data*	
Misrata	666.0	No data	-21.3%	
Alkhums	642.6	No data	-6.6%	
Zwara	610.3	-1.2%	-17.3% -16.0% -20.5% -20.2%	
Al Aziziya	608.2	-1.6%		
Sabratha	607.9	-2.0% -2.3%		
Azzawya*	597.4			
Median West	687.5	2.0%	-7.7%	
Tobruk	728.8	11.7%	-6.2%	
Alkufra	724.3	-3.0%	-27.5%	
Ejdabia	699.6	4.5%	-9.2%	
Albayda	698.8	6.9%	-12.3%	
Benghazi	670.8	670.8 1.9%		
Derna	657.5	-3.5%	-9.4%	
Median East	691.6	3.9%	-11.1%	
Algatroun	1183.7	12.0%	0.1%	
Ghat	1099.8	3.7%	0.3%	
Ubari	1087.0	7.6%	3.8%	
Wadi Etba	890.9	-4.1%	No data*	
Aljufra	851.3	6.0%	-6.6%	
Sebha	785.1	8.2%	-6.3%	
Brak	744.5	8.7%	-11.3%	
Median South	906.0	2.9%	-9.2%	
Median Overall	705.7	1.0%	-8.4%	

#### \* A lack of information is due to data collection beginning from March 2019 onwards

### **EXCHANGE RATES OVER TIME<sup>9</sup>**

### January 2016-January 2019

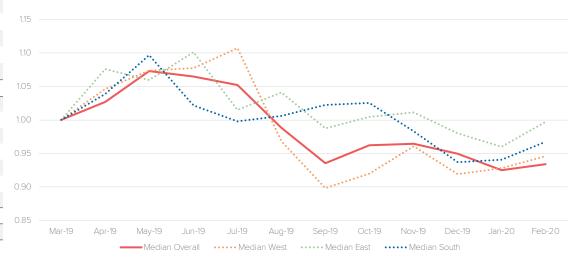


### **MEB PRICE INDEX**

----- USD/LYD (official)

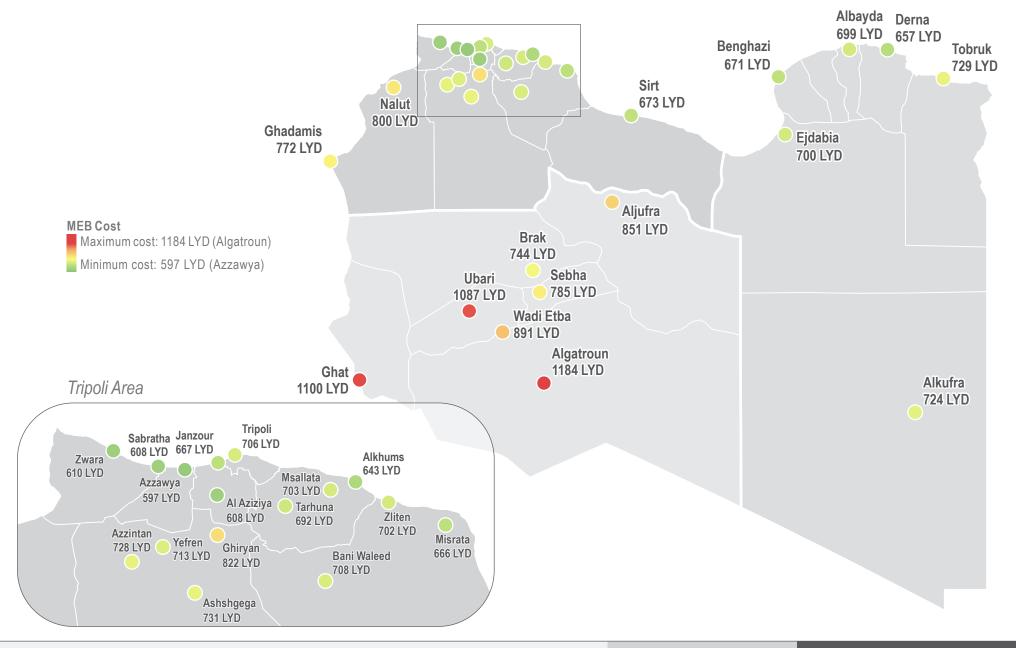
Since March 2019 (normalised, March 2019 = 1.00)<sup>12</sup>

...... USD/LYD (official) + tax



---- EUR/LYD (parallel market)

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

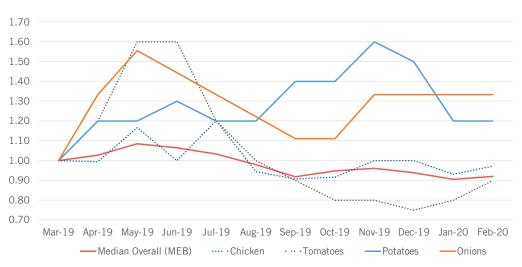


### PRICES OF MONITORED ITEMS

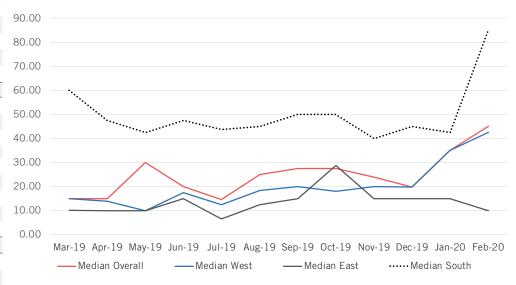
Item	Unit	Median ( price (LYD)	Change since Jan 2020	Change since Jan 2019
Food items				
Chickpeas	400 g	1.75	16.7%	-30.0%
Milk	1 L	3.44	14.6%	14.6%
Condensed milk	200 ml	2.00	13.6%	-27.3%
Tomatoes	1 kg	2.25	12.5%	0.0%
Black tea	250 g	5.50	7.3%	-18.5%
Eggs	30 eggs	10.63	6.3%	-3.4%
Chicken	1 kg	8.75	4.5%	-5.4%
Couscous	1 kg	3.31	3.9%	-5.4%
Beans	400 g	1.75	3.7%	-30.0%
Rice	1 kg	3.31	1.9%	-26.4%
Flour	1 kg	2.00	0.0%	-20.0%
Lamb meat	1 kg	35.00	0.0%	0.0%
Onions	1 kg	3.00	0.0%	50.0%
Pasta	500 g	1.50	0.0%	0.0%
Peppers	1 kg	4.00	0.0%	0.0%
Potatoes	1 kg	3.00	0.0%	50.0%
Salt	1 kg	1.00	0.0%	0.0%
Tomato paste	400 g	2.00	0.0%	-20.0%
Vegetable oil	400 g	4.50	0.0%	-7.7%
Bread	5 pieces		-1.7%	-5.0%
	•	2.31	-1.7%	-5.0% -7.5%
Sugar Green tea	1 kg	3.00	-7.7%	-7.5%
Canned tuna	250 g	3.00		
	200 g	3.00	-11.3%	-31.5%
Hygiene items	4.1	0.05	F 00/	07.50/
Laundry detergent	1 L	2.25	5.9%	87.5%
Baby diapers	30	15.00	3.4%	-6.3%
Handwashing soap Sanitary pads	1 bar	1.50 3.50	0.0%	-25.0% 0.0%
Shampoo	10 pads 250 ml	5.00	0.0%	-32.8%
Toothbrush	1 brush	2.00	0.0%	0.0%
Laundry powder	1 kg	6.69	-4.5%	-10.8%
Dishwashing liquid	1 L	2.31	-9.8%	54.2%
Toothpaste	100 ml	3.50	-22.2%	-41.7%
Other items		0.00		,3
Unofficial LPG	11 kg	45.00	28.6%	350.0%
Official LPG	11 kg	5.00	0.0%	0.0%
	_			*****
Bottled water	1 L	0.29	0.0%	0.0%

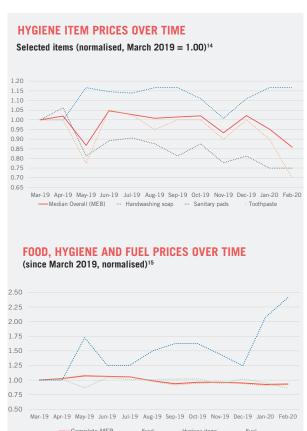
### **FOOD PRICES OVER TIME**





## PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11-KG LPG CYCLINDER) (since March 2019, non-normalised)





### NOTABLE MONTH-ON-MONTH CHANGES

Unofficial LPG

Toothpaste

Chickpeas

Milk

Condensed Milk

↑ +28.6%

↑ -22.2%

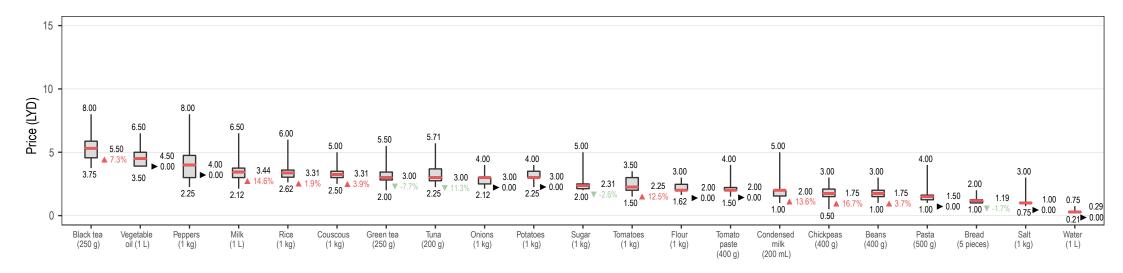
↑ +16.7%

↑ +14.6%

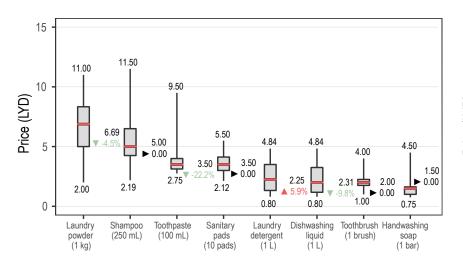
↑ +14.6%

### **Distribution of Prices in Libya**

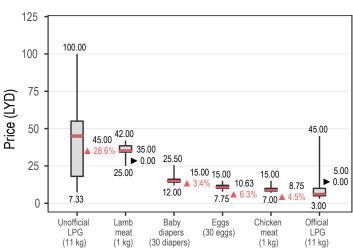
### **FOOD ITEMS**



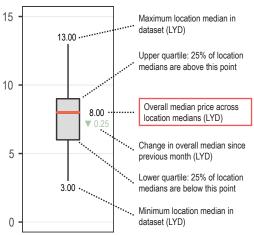
### **HYGIENE ITEMS**



### ITEMS WITH HIGHEST PRICES



### How to read a boxplot



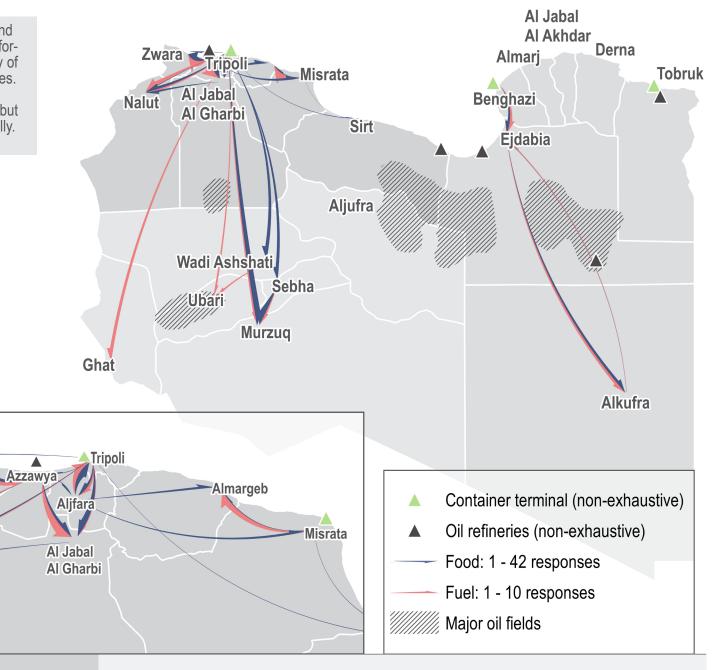
The 'location median' is calculated by first finding the median price of a given item in each assessed location, then taking the median of the resulting set of median prices.

### **Main Food and Fuel Supply Routes**

This map indicates the source and flow of transported fuel and food products according to the shop owner and vendor key informants (KIs). The arrow sizes are determined by the quantity of responses and provide an indicative scale of the supply routes.

The routes show the flow of goods from mantika to mantika, but does not show the proportion of goods that are sourced locally.

Tripoli Area



Nalut

Zwara,

### **Appendix**

#### PREVIOUS JMMI OUTPUTS **Factsheets Datasets** 2020 January January 2019 December December November November October October September September August August July July June June May May April April March March February February January January 2018 December December November November October October September September August August July July June June Mav May April April March March February February January January **Trends Analyses** January-June 2018 June-December 2017

### MARK-UPS FOR ALTERNATIVE MODALITIES

E-cards (credit, debit)

Certified cheques

Mobile money

NA

0-30%

0%

### What is the CWG?

The Libya Cash Working Group (CWG), established in August 2016, is a community of humanitarian actors that support and coordinate cash-based interventions in Libya. The CWG, 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 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**

- $^{\rm 1}$  Libya faces 'catastrophic financial crisis' due to oil blockade, Al Jazeera, 16 February 2020
- $^2$  Libya oil production at 123,537 bpd as of Feb.18 -NOC statement, Reuters, 18th February 2020
- <sup>3</sup> Libya's Azzawiya stops refining operations due to lack of crude, February 9th 2020
- Libya: rich in oil, leaking fuel, Tim Eaton, Chatham House, October 2019
   Weekly Energy, Economic and Geopolitical Outlook, MEES, 24th January 2020
- Weekly Energy, Economic and Geopolitical Outlook, MEES, 24th January 2020
   Libya internet prices reduced by 50 percent, Libya Herald, 23rd February
- <sup>7</sup> Official rate: Central Bank of Libya (1 February 2020). Parallel market rates: Ewan Libya (1 February 2020). The rates from 1 January 2020 and 1 February 2020 were used for the calculation of the monthly changes.
- $^8\mbox{The}$  cooking fuel price is calculated by taking the average of the official LPG median and the unofficial LPG median
- <sup>9</sup> Official rate: Central Bank of Libya (1 February 2020). Parallel market rates: Ewan Libya (1 February 2020). The rates from 1 January 2020 and 1 February 2020 were used for the calculation of the monthly changes.
- <sup>10</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.
- The 20% float includes expenses on healthcare, medicine, education, utilities, transportation, and communications.
- $^{\rm 12}$  The MEB price index was normalised by setting March  $\,$  2019 as the baseline and dividing each month's price by the price in March  $\,$  2019 .
- $^{\rm 13}$  The food prices were normalised by setting March 2019 as the baseline and dividing each month's price by the price in March 2019 .
- $^{14}\,$  The hygiene prices were normalised by setting March 2019 as the baseline and dividing each month's price by the price in March 2019 .
- <sup>15</sup> The fuel, food and hygiene prices were normalised by setting March 2019 as the baseline.

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 nonprofil, 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.

