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

METHODOLOGY

respective locations.

KoBoCollect mobile application.

informant (KI) interviews.

rental market in Libya.

the Appendix.

for each item.

• Field staff familiar with the local market conditions identified

shops representative of the general price level in their

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

• Enumerators were trained on methodology and tools

· 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

During the October 2021 round, enumerators surveyed 484

customers from a number of shops to ask questions focused

on access to cash and alternative payment modalities.

Secondly, enumerators collected data on the transportation

costs between Tripoli and 5 other cities namely, Azzawya,

Misrata, Zliten, Sabratha and Zwara. A calculation of the

• REACH has extracted prices on a daily basis from the

website, "Open Souq" and conducted KI interviews with

property market professionals to better understand the

· More details are available in the Methodology section of

different costs is descriptively presented.

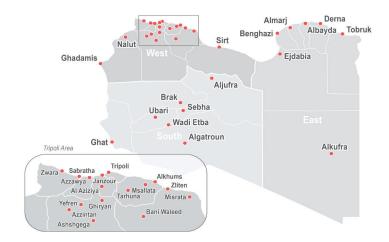
by REACH. Data collection was conducted through the

## 1 - 13 October 2021

## 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).
- REACH has also conducted analysis highlighting economic vulnerability for at-risk population groups that can be accessed through an interactive dashboard.

## **COVERAGE**



## **Libya Cash Working Group**



## **JMMI KEY FINDINGS**

- The cost of the overall MEB consistently increased between August and October 2021 by 6.51% (+50.13 LYD). This increase in prices may be due to the inflation resulting from the government's decision to increase salaries,<sup>2</sup> for example in the education sector.<sup>3</sup>
- In August, the head of the Central Bank of Libya (CBL) warned that the new budget may have an inflationary and detrimental effect on the dinar resulting in higher commodity prices.<sup>4</sup>
- The cost of the MEB showed an increase in both the west (+4.4%) and the east (+2.3%), whereas it decreased in the south by -7.3%. Compared to pre-COVID levels in March 2020, the cost of the MEB in October 2021 increased by 30.3%.
- Between September and October 2021, the cost of the food proportion of the overall MEB showed an increase of **3.8%**. This overall increase was driven by an increase in prices of onions (+25%), sugar (+16.7%), chicken (+15.6%) and green tea (+14.3%).
- The prices of hygiene items decreased by -2.6%. This
  was mainly driven by a decrease in prices of some items
  such as dishwashing liquid (-41%), laundry powder
  (-19.1%) and toothbrushes (-16.7%) (See page 3).
- Between September and October 2021, some pharmaceutical items showed an increase in price, including metoclopramide (+18.5%), paracetamol (+3.6%) and amoxicillin (+8.7%), whereas the price of ibuprofen decreased with (-11.1%) (See page 3).
- The cost of the cooking fuel proportion in the overall MEB did not show a change from September to October 2021 (0.0%). The price of the cooking fuel component of MEB was reported to be 27.50 LYD in both September and October 2021.
- Among the 484 customers interviewed for understanding access to cash and alternative payment modalities, 34.3% reported getting cash from their workplace. Others reported selling cheques on the parallel market (25.4%), exchanging cheques with businesses (2.27%) and borrowing cash from vendors (3.72%).<sup>5</sup>
- The median transportation cost to travel from Tripoli-Zwara and from Tripoli-Zliten is reported to be 25 LYD. It is 22.5LYD traveling from Tripoli-Misrata, 15 LYD to travel from Azzawya-Tripoli as well as from Sabratha-Tripoli.<sup>6</sup>

## **JMMI KEY FIGURES**

Data collection from 1 - 13 October 2021

2 participating agencies: (REACH, WFP)

**36** assessed cities

**46** assessed items

**663** assessed shops

## **EXCHANGE RATES** <sup>1</sup>

**4.571 USD/LYD**official

▲ + 0.9%

4.890 USD/LYD parallel market ▼ - 2.6 % 5.560 EUR/LYD parallel market

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

## **Median cost of overall MEB**

820.40 LYD **A** +24.03 LYD

D ▲ +3%

Food items 4 + 3.8%

Hygiene items

▼ -2.6%

ms Cooking Fuel 0.0%

## **MEDIAN COST OF MEB BY REGION**

West	836.15 LYD	<b>A</b> + 4.4%
East	754.65 LYD	<b>▲</b> + 2.3%
South	870 33 LVD	<b>v</b> - 7.3 %

#### **MEDIAN TRANSPORTATION COST TO & FROM TRIPOLI**

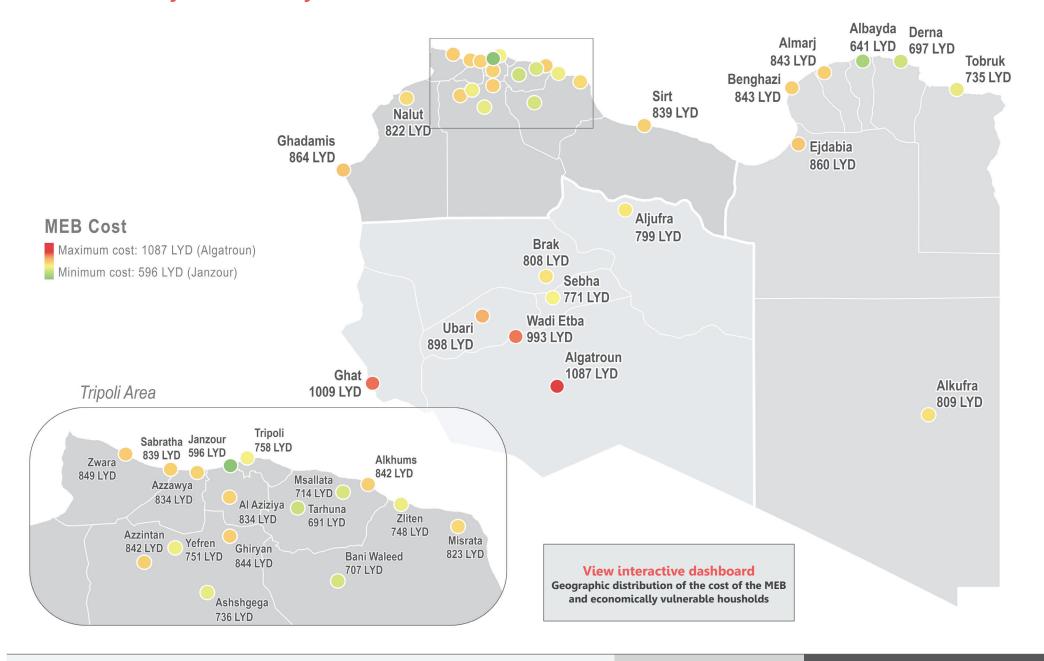
Zwara	25 LYD
Zliten	25 LYD
Misrata	22.5 LYD
Azzawya	15 LYD
Sabratha	15 LYD

#### **MARKET SHORTAGES**

None reported

Reported changes are month-on-month

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

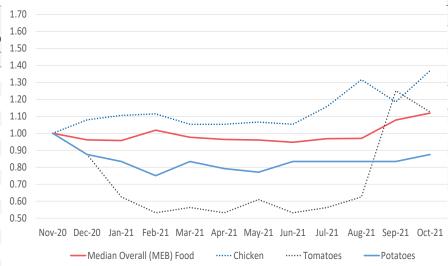


## **PRICES OF MONITORED ITEMS**

Item	Unit	Median price	Change since September 2021	Change since March 2020
Food items				
Tomatoes	1 kg	4.50	-2.4%	+14.1%
Green tea	250 g	4.00	+14.3%	+33.3%
Vegetable oil	1 L	8.25	+1.5%	+83.3%
Black tea	250 g	6.88	-1.8%	+37.5%
Onions	1 kg	2.50	+25.0%	-16.7%
Rice	1 kg	3.88	+3.3%	+19.2%
Eggs	30 eggs	13.50	-10.0%	+35.0%
Pasta	500 g	2.00	+3.1%	+33.3%
Milk	1 L	3.88	+2.6%	+10.7%
Beans	400 g	2.50	0.0%	+53.8%
Bread	5 pieces	1.25	0.0%	+11.1%
Chickpeas	400 g	2.50	0.0%	+66.7%
Peppers	1 kg	4.00	0.0%	0.0%
Potatoes	1 kg	2.63	+5.0%	-12.5%
Sugar	1 kg	3.50	+16.7%	+47.4%
Tomato paste	400 g	2.88	+4.5%	+43.8%
Tuna	200 g	4.85	+15.6%	+61.5%
Condensed Milk	200 mL	2.21	-8.7%	+10.5%
Couscous	1 kg	3.63	0.0%	+3.6%
Lamb meat	1 kg	40.50	-2.4%	+14.1%
Flour	1 kg	3.00	+9.1%	+50.0%
Chicken meat	1 kg	13.00	+15.6%	+38.7%
Salt	1 kg	1.00	0.0%	0.0%
Hygiene items				
Toothbrush	1 brush	2.50	-16.7%	+25.0%
Laundry detergent	1 L	6.00	+73.2%	+166.7%
Toothpaste	100 mL	6.00	-7.7%	+50.0%
Baby diapers	30	20.00	+2.6%	+33.3%
Handwashing	1 bar	2.25	-6.4%	+50.0%
Laundry powder	1 kg	6.74	-19.1%	+3.6%
Sanitary pads	10 pads	4.00	0.0%	+14.3%
Shampoo	250 mL	5.18	-6.9%	+2.1%
Bleach	1 L	11.28	+12.8%	No data
Hand Sanitiser	1 L	18.00	+5.9%	No data
Dishwashing	1 L	1.55	-41.0%	-42.1%
Other items				

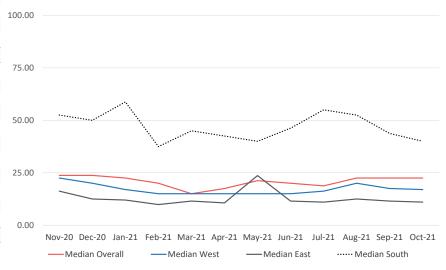
## **FLUCTUATION OF FOOD PRICES OVER TIME**

Selected items (normalised, November 2020 = 1.00)<sup>7</sup>



# PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LIQUEFIED PETROLEUM GAS (LPG) CYLINDER)

(Since November 2020, non-normalised)



## PRICES OF FUEL AND HEALTH

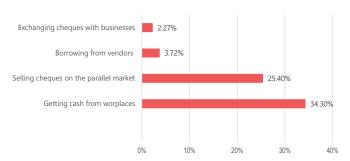
Item Unit		Median price (LYD)	Change since September 2021	Change since March 2020
Fuel items				
Unofficial LPG	11 kg	22.50	0.0%	-35.7%
Unofficial Gasoline	1 Litre	0.75	+20.0%	No data
Official LPG	11 kg	5.00	0.0%	0.0%
Official Gasoline	1 Litre	0.15	0.0%	No data
Pharmaceutical iter	ms			
Paracetamol	400mg [20 pack]	7.25	+3.6%	+4.5%
Vitamin B	[40 pack]	15.25	0.0%	+48.8%
Amoxicillin	500mg [21 pack]	10.25	+2.5%	+13.9%
Metoclopramide	10mg [40 pack]	15.15	+18.25	+51.5%
Ibuprofen	400mg [20 pack]	6.75	-11.1%	+22.7%

#### FLUCTUATION OF HYGIENE ITEM PRICES OVER TIME





#### % OF CUSTOMER RESPONDENTS CASH ATTAINMENT ALTERNATIVES



0.0%

0.0%

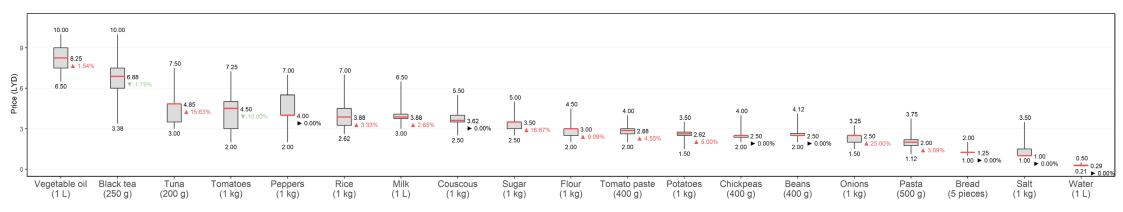
0.29

1 L

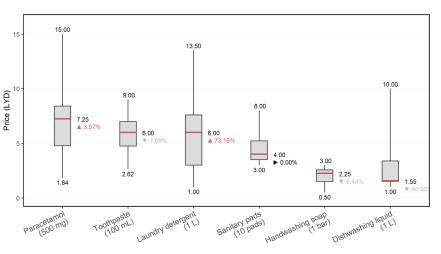
Water

## **Distribution of Prices in Libya**

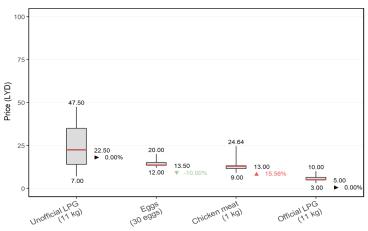
## **FOOD ITEMS**



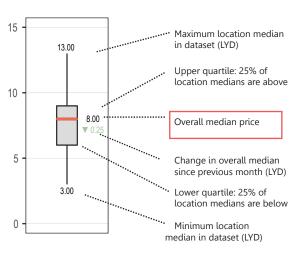
## **HYGIENE ITEMS**



## **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.

## **Rent Monitoring**

## Introduction

- Ever since the onset of the conflict in and around Tripoli and Murzuq in April 2019, Tripoli has been a key displacement destination for Internally Displaced Persons (IDPs)<sup>9</sup>. Furthermore, conflict related political tensions in West Libya led large numbers of IDPs to move to eastern cities, especially Benghazi.
- REACH is therefore exploring rent monitoring as part of the JMMI, in order to provide humanitarian actors with a more accurate overview of key expenditures facing IDPs in Tripoli and Benghazi.

## Methodology

- From May 2020 onwards, in addition to the price monitoring of key items (MEB), REACH began analyzing rental prices, which were extracted on a daily basis from the website 'Open Souq'. In October 2021, rental prices were collected in Tripoli and Benghazi. The price change findings are indicative.
- In order to standardise property prices, key features were isolated through consultation with KIs to identify the average apartment specification for typical HHs in Tripoli and Benghazi. The average apartment for typical HHs was found to be a furnished, 3-bedroom apartment with 1 bathroom. All rental prices presented in this report have been standardised to this accommodation type.

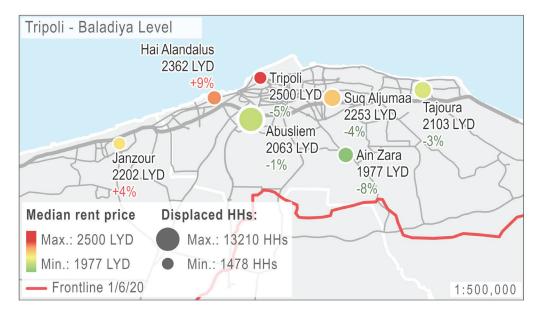
## **Key Findings**

- Rental prices have increased slightly since September 2021 in Tripoli (+1.6%). However, they have decreased substantially compared to May 2020 (-17.9%) in this area. Whereas in Benghazi the prices have increased (+3.7%) compared to May 2020.
- The change in IDPs numbers between June and September 2021 in Benghazi have slightly increased (0.9%) when the change in the IDPs in Tripoli have decreased by -6.1%. As for returnee numbers, during the same period, they remain the same in tripoli and they have increased in Benghazi (+1.1%).

## **Standardised rental prices October 2021**

Location	Standard price (LYD)	Since September 2021	Since May 2020	Change in IDPs* Jun-sep	Change in Returnees** Jun-sep
Municipality					
Abusliem	2063	-1.2%	-23.1%	0.0%	0.0%
Ain Zara	1977	-8.5%	-32.3%	172.7%	0.7%
Hai Alandalus	2362	9.0%	-11.9%	0.0%	0.0%
Janzour	2202	3.7%	-4.4%	-27.3%	0.0%
Suq Aljumaa	2253	-3.6%	-16.0%	-21.4%	0.0%
Tajoura	2103	-3.0%	-10.7%	0.3%	150.0%
Tripoli Center	2500	-4.9%	-16.3%	78.1%	0.0%
Tripoli Overall	2202	1.6%	-17.9%	-6.1%	0.0%
Benghazi Overall	2054	-0.4%	3.7%	0.9%	1.1%

<sup>\*</sup> Change in the number of IDPs and returnees are derived from the latest Displacement Tracking Matrix (DTM) (Round 38) from the International Organization of Migration (IOM). \*\* Numbers based on IOM-DTM numbers as well, comparing June 2021 to September 2021.





### **MINIMUM EXPENDITURE BASKET (MEB)**

## **Key Elements: Food Items**

Bread Rice	32 kg 10.5	Tomatoes Potatoes	10 kg 12 kg
Pasta	kg	Onions	7 kg
Couscous	9.5 kg	Peppers	4.5 kg
Beans	5.5 kg	Tomato paste	6 kg
Chicken	6 kg	Black tea	2 kg
Tuna	7.5 kg	Vegetable oil	5 L
Eggs	4 kg	Sugar	2 kg

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

Bathing soap	1.4 kg (9 150-g bars)
Toothpaste	0.5 kg (5 100-g tubes)
Laundry detergent	1.3 L
Dishwashing liquid	1.3 L
Sanitary pads	4 packs of 10
Cooking fuel (LPG)	22 kg (2 11-kg refills)

## **Optional Elements**

Water (drinking use

only) 458 L Median rent for 3-rm 1 month

flat

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.

#### **COST OF MEDIAN OVERALL MEB**

820.40 LYD

Change since
September 2021

+ 24.03 LYD

(+3%)

Change since March 2020 ▲ + 190.94 LYD (+30.3%)

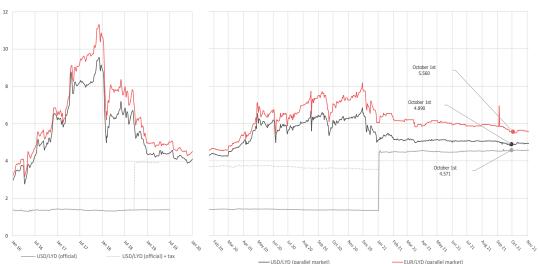
## MEDIAN MEB COST BY LOCATION

Location	Cost of MEB (LYD)	Since September 2021	Since March 2020
Nalut	822.03	-0.6%	+12.3%
Azzintan	842.15	+3.1%	+23.8%
Ghiryan	844.40	+3.7%	+21.0%
Zwara	849.40	+4.7%	+55.3%
Ghadamis	864.27	+6.6%	+26.5%
Sabratha	839.40	+4.0%	+50.6%
Azzawya	834.40	+4.1%	+52.8%
Sirt	839.40	+4.8%	+38.6%
AlKhums	841.77	+5.4%	+55.9%
Misrata	823.06	+4.4%	+46.8%
Al Aziziya	833.57	+6.2%	+52.3%
Ashshgega	735.76	-6.2%	+13.9%
Zliten	747.66	-4.3%	+21.5%
Yefren	750.70	-2.5%	+14.5%
Tripoli	758.09	+1.7%	+15.8%
Msallata	714.24	-1.7%	+19.8%
Tarhuna	690.85	-1.3%	+17.4%
Bani Waleed	706.66	+2.9%	+18.3%
Janzour	595.73	+1.4%	+0.5%
Median West	836.15	+4.4%	+33.9%
Benghazi	842.85	-1.2%	+37.7%
Ejdabia	859.88	+6.3%	+32.5%
AlMarj	842.63	+6.8%	+31.7%
AlKufra	808.83	+4.1%	+23.9%
Tobruk	735.46	-0.7%	+17.0%
AlBayda	640.71	-7.0%	-0.7%
Derna	696.83	+8.2%	+14.5%
Median East	754.65	+2.3%	+19.8%
Algatroun	1086.99	-2.3%	-3.9%
Ghat	1008.69	-6.2%	-11.9%
Wadi Etba	993.12	-3.0%	+18.2%
Ubari	898.15	-7.9%	-17.7%
AUufra	799.15	-7.0%	+3.6%
Brak	807.58	-1.0%	+10.8%
Sebha	771.08	-0.2%	+2.0%
Median South	870.33	-7.3%	-1.0%
Median Overall	820.40	+3.0%	+30.3%

## **EXCHANGE RATES OVER TIME<sup>10</sup>**

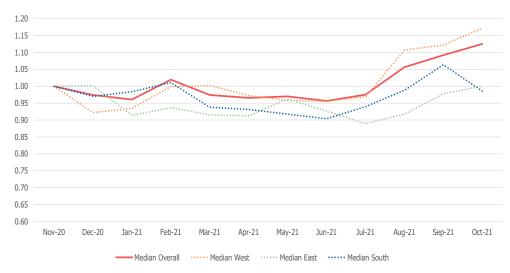
January 2016-January 2020

Since February 2020



## **MEB PRICE INDEX**

Since November 2020 (normalised, November 2020 = 1.00)<sup>11</sup>



## **PREVIOUS JMMI OUTPUTS**

## Factsheets Datasets

### 2021

Septembe
August
July
June
May
April
March
February
January

## 2020

December December November November October October September September August August July July June June May May April April March March **February** February January January

## 2019

December December November November October October September September July July June 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 2.

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.

#### **Rent Price Monitoring**

Benghazi consists of only one municipality, therefore neighbourhoods across the city were grouped together into 11 area units.

Limitations: the data collected are new offers presented by Open Souq, therefore they may not represent the rental expenses of all IDPs, as tenants may receive cheaper offer through informal channels.

#### Endnotes

- 1 Official rate: Central Bank of Libya (27 January 2021). Parallel marketrates: Ewan Libya (27 January 2021). The rates from 1 January 2021 and 1 January 2020 were used for the calculation of the monthly changes.
- 2 Libya Herald: Parliament only partially approves 2021 budget, calls Finance Minister for questioning, creates committee to study amended budget (May 2021). (https://www.libyaherald.com/2021/05/25/parliament-only-partially-approves-2021-budget-calls-finance-minister-for-questioning-creates-committee-to-study-amended-budget/).
- 3 The Libya Observer: GNU allocates 2.25 billion dinars to support wages of employees of the Ministry of Education (September 2021). (https://www.libyaobserver.ly/inbrief/gnu-allocates-225-billion-dinars-support-wages-employees-ministry-education).
- 4 Libya Herald: Size of huge LD 111 2020 budget due to parliament pressure on government will lead to high inflation and further dinar devaluation: member of CBL Committee (August 2021). (https://www.libyaherald.com/2021/08/09/size-of-huge-ld-111-2020-budget-due-to-parliament-pressure-on-government-will-lead-to-high-inflation-and-further-dinar-devaluation-member-of-cbl-committee/).
- 5 The rest did not accept to answer the question.
- 6 The median prices travelling from a city to another are equal in both direction. In other words median cost to travel from Tripoli-Misrata is the same as Misrata-Tripoli.
- 7 The food prices were normalised by setting November 2020 as the baseline and dividing each month's price by the price in November 2020.
- 8 The hygiene prices were normalised by setting November 2020 as the baseline and dividing each month's price by the price in November 2020.
- 9 Libya IDP and Returnee Report November December 2020, DTM IOM, October 2020
- 10 Official rate: Central Bank of Libya (1 January 2021). Parallel market rates: Ewan Libya (1 January 2021). The rates from 1 January 2021 and 1 January 2021 were used for the calculation of the monthly changes.
- 11 The MEB price index was normalised by setting November 2020

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,