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

2 - 10 April 2020

# Libya Cash 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 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 Office for Foreign Disaster Assistance (OFDA) and the United Nations High Commissioner for Refugees (UNHCR).

April JMMI price data largely confirms preliminary price changes outlined by key informants in the Rapid Market Assessment (RMA) published on April 9th. The RMA provides indicative data from market vendors in the assessed cities and thus should be read in conjunction with the more accurate JMMI pricing data.

This factsheet presents an overview of price ranges and medians for key food items and non-food items (NFIs) in the assessed areas, as well as the costs associated with key elements of the Minimum Expenditure Basket (MEB). Due to COVID-19, the JMMI data will be collected on a weekly basis.

### **METHODOLOGY**

- · Field staff familiar with the local market conditions identified shops representative of the general price level in their respective locations.
- At least three 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 the MEB in each assessed market.
- More details are available in the Methodology section of the Appendix.

### **KEY FINDINGS**

- The most notable increases in the cost of the MEB were; Nalut (+50.4%), Ashshgega (+50%), Sabratha (+49.1%), Ghadamis (48.7%) and Algatroun (+44.5%). The following factors are likely to have contributed to the increase in the cost of living in the last month: 1. Stockpiling of essential goods due COVID-19, 2. 26% increase in the parallel market USD/LYD exchange rate from December 2019 - April 2020, 3. the Central Bank of Libya halted foreign currency transactions during the month of March, stemming the flow of goods into the country. 4. On-going conflict in west Libya has blocked supply routes. 1,2
- The highest price increases for commodities were; tomatoes (+100%), peppers (+75%), flour (+50%) and eggs (+45%). The median price for tomatoes has increased by 200-300% in Ain Zara, Ashshqega, Albayda, Benghazi, Msallata, Tajoura, Tobruk and Wadi Etba. The median price for peppers has at least doubled in 35% of all assessed urban centres. Despite flour prices increasing significantly, the Ministry of Economy has claimed that the country has 3-months worth of wheat flour supply.3 This may indicate that flour prices will stabilise, or the commodity will increase in availability due to less stockpiling.
- Whilst global crude oil prices were at 20-year low during the beginning of April, unofficial fuel prices continued to increase across Libya due to the on-going oil blockade that has prevented Libya's oil refineries from receiving sufficient crude oil. The changes recorded since March throughout west (+57%), east (+150%) and south (+116%). Since December unofficial liquified petroleum gas cylinder (LPG) prices rose 177% in west Libya, 233% in east Libya and 344% in the south. Cities in the south are reporting median prices of 240 LYD for a 11-kg LPG cylinder compared to 100 LYD in March. According to key informants, the Sebha Consumer Cooperative is attempting to distribute 3000 LPG cylinders a week at the price of 30 LYD. Price controls and staple goods subsidies have been reported in the south and the east.4
- On the 20th April, global crude oil prices dropped below zero, potentially providing relief for Libyan consumers.5

#### **JMMI KEY FIGURES**

Data collection from 2 - 10 April 2020

3 participating agencies (DRC, REACH, WFP)

34 assessed cities

31 assessed items

417 assessed shops

### **EXCHANGE RATES<sup>6</sup>**

1.412 4.950 USD/LYD USD/LYD official parallel market **+**0.2% **+**15.9%

5.350 **EUR/LYD** parallel market **+16.6%** 

**KEY MONTHLY CHANGES IN MEB** 

Median cost of overall MEB

803.20 LYD ▲ 178.64 LYD ▲ +28.9%

Food items Hygiene items Cooking fuel.8

**+** +26.6%

**+11.9% +62.5%** 

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

+28.9% West 685.2 LYD East +13.2% ▲ 710.88 LYD South 890.53 LYD +42.6% A

#### **MARKET SHORTAGES**

- · In south Libya, LPG is only available on parallel markets
- · LPG not available in Ghadamis, Sirte, Bani Waleed, Tarhuna, Al Aziziya and Zwara

Reported changes are month-on-month

Access the JMMI online dashboard

# **KEY PRICE SPIKES**

2.20					
2.10					
2.00					
1.90					
1.80					
1.70					•
1.60					
1.50				/_;	· ·
1.40				<b></b> / ÷	
1.30					
1.20					
1.10					
1.00					
0.90					
	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20
	<del></del> Eggs	····· Flour	····· Peppers	—— Tomatoes	

### MINIMUM EXPENDITURE BASKET (MEB)

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

Bread	32 kg	Tomatoes	10 kg
Rice	10.5 kg	Potatoes	12 kg
Pasta	9.5 kg	Onions	7 kg
Couscous	5.5 kg	Peppers	4.5 kg
Beans	6 kg	Tomato paste	6 kg
Chicken	7.5 kg	Black tea	2 kg
Tuna	4 kg	Vegetable oil	5 L
Eggs	4 kg	Sugar	2 kg
Milk	8.5 L	Salt	1 ka

#### **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<sup>10</sup>

Water (drinking use

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

Float<sup>11</sup> 20% of key elements

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 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**

803.20 LYD

Change since March 2020 ▲ 178.64 LYD (+28.9%) Change since March 2019 ▲ 133.57 LYD (+19.9%)

### MEDIAN MEB COST BY LOCATION

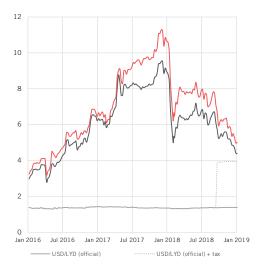
Location	Cost of MEB* (LYD)	Since March 2020	Since March 2019
Nalut	1100.9	50.4%	55.8%
Ghadamis	1016.2	48.7%	47.1%
Ashshgega	969.3	50.0%	48.9%
Yefren	869.4	32.6%	27.8%
Zintan	861.1	26.6%	27.9%
Gharyan	851.0	22.0%	21.6%
Bani Walid	844.6	41.4%	34.7%
Sabratha	831.2	49.1%	29.9%
Msallata	826.6	38.7%	40.2%
Tripoli	795.7	21.5%	23.2%
Zwara	779.7	42.5%	17.5%
Azzawya	771.9	41.4%	19.2%
Tarhuna	766.9	30.3%	20.4%
Al-Khums	759.1	40.6%	19.1%
Al-Aziziya	736.1	34.5%	16.5%
Misrata	711.3	26.9%	14.1%
Zliten	700.6	13.9%	7.0%
Sirt	671.0	10.8%	15.1%
Janzour	658.1	11.0%	13.3%
Median West	797.0	29.9%	23.7%
Al-Bayda	901.2	39.7%	47.4%
Tobruk	901.2	43.3%	45.7%
Benghazi	828.4	35.3%	36.8%
Ajdabiya	779.1	20.0%	25.3%
Almarj	727.7	13.8%	21.4%
Alkufra	681.1	4.4%	3.0%
Derna	664.2	9.1%	7.8%
Median East	719.0	13.2%	17.1%
Algatroun	1634.6	44.5%	54.8%
Ghat	1430.9	25.0%	35.9%
Ubari	1375.9	26.1%	39.4%
Wadi Etba	1214.1	44.5%	No data
Sebha	1019.4	34.9%	48.2%
Brak	1003.3	37.6%	42.9%
Aljufra	923.8	19.7%	23.2%
Median South	1253.3	42.6%	46.9%
Median Overall	803.2	28.6%	19.9%

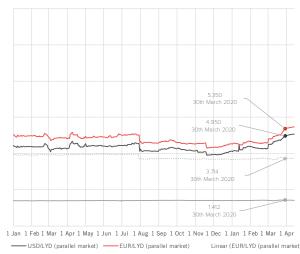
#### \* MEB was rescaled to HH size 5 and includes an additional LPG cylinder

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

### January 2016-January 2019

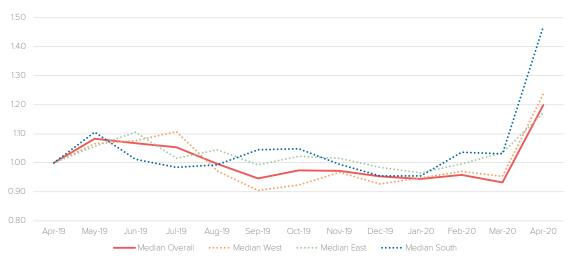
### Since January 2019



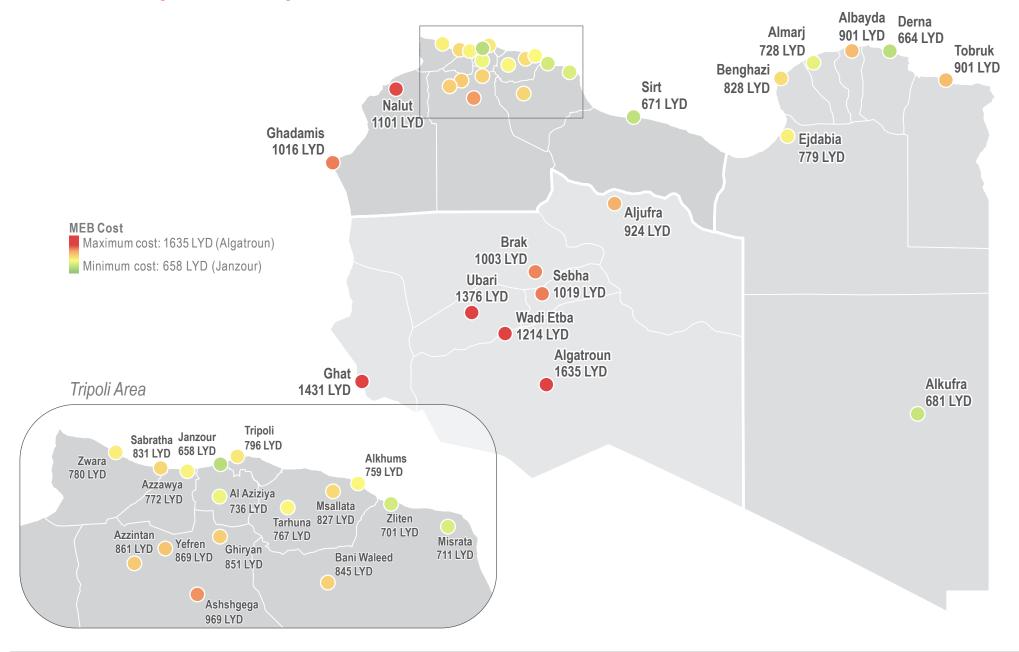


### **MEB PRICE INDEX**

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



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

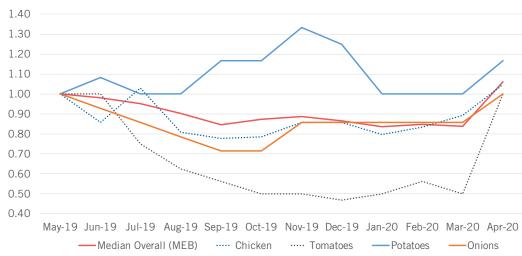


### PRICES OF MONITORED ITEMS

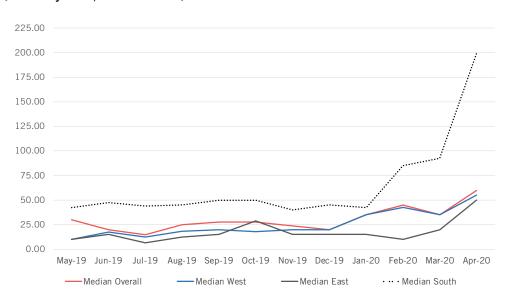
Item	Unit	Median ( price (LYD)	Change since Mar 2020	Change since Mar 2019
Food items				
Tomatoes	1 kg	4.00	100.0%	60.0%
Peppers	1 kg	7.00	75.0%	55.6%
Flour	1 kg	3.00	50.0%	33.3%
Eggs	30 eggs	14.50	45.0%	38.1%
Tomato paste	400 g	2.75	37.5%	22.2%
Chickpeas	400 g	2.00	33.3%	-11.1%
Vegetable oil	1 L	6.00	33.3%	26.3%
Milk	1 L	4.50	28.6%	38.5%
Sugar	1 kg	3.00	26.3%	41.2%
Salt	1 kg	1.25	25.0%	25.0%
Beans	400 g	2.00	23.1%	-15.8%
Black tea	250 g	6.00	20.0%	-5.9%
Chicken	1 kg	11.00	17.3%	22.2%
Onions	1 kg	3.50	16.7%	55.6%
Pasta	500 g	1.75	16.7%	16.7%
Potatoes	1 kg	3.50	16.7%	40.0%
Canned tuna	200 g	3.50	16.7%	-18.4%
Rice	1 kg	3.75	15.4%	-6.3%
Couscous	1 kg	4.00	14.3%	28.0%
Bread	5 pieces	1.25	11.1%	0.0%
Hygiene items	- р			
Laundry detergent	1 L	3.25	44.4%	150.0%
Handwashing soap	1 bar	2.00	33.3%	0.0%
Sanitary pads	10 pads	3.88	10.7%	29.2%
Toothpaste	100 ml	4.00	0.0%	-20.0%
Dishwashing liquid	1 L	2.00	-25.2%	33.3%
Hand Sanitiser	1 L	33.00	No data	No data
Bleach	1 L	13.50	No data	No data
Other items				
Unofficial LPG	11 kg	60.00	71.4%	300.0%
Paracetemol	12 pack	7.00	0.9%	No data
Bottled water	1 L	0.29	0.0%	0.0%
Official LPG	11 kg	5.00	0.0%	0.0%

### **FOOD PRICES OVER TIME**





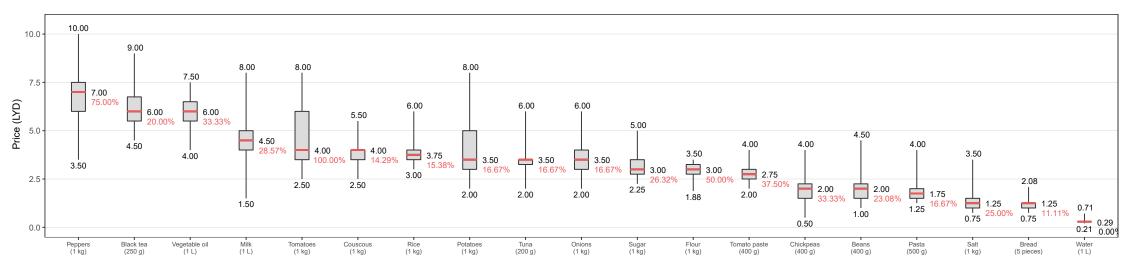
# PRICES FROM UNOFFICIAL COOKING FUEL VENDORS (11 KG LPG CYCLINDER) (since May 2019, non-normalised)



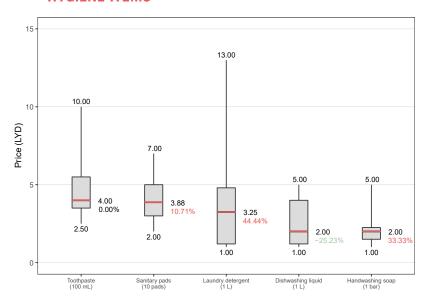


# **Distribution of Prices in Libya**

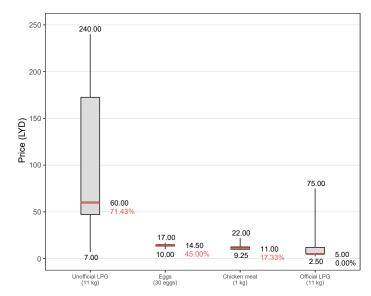
## **FOOD ITEMS**



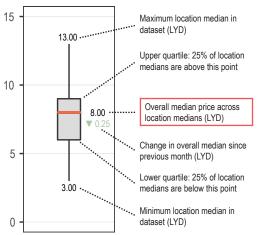
### **HYGIENE ITEMS**



# **ITEMS WITH HIGHEST PRICES**



# How to read a boxplot

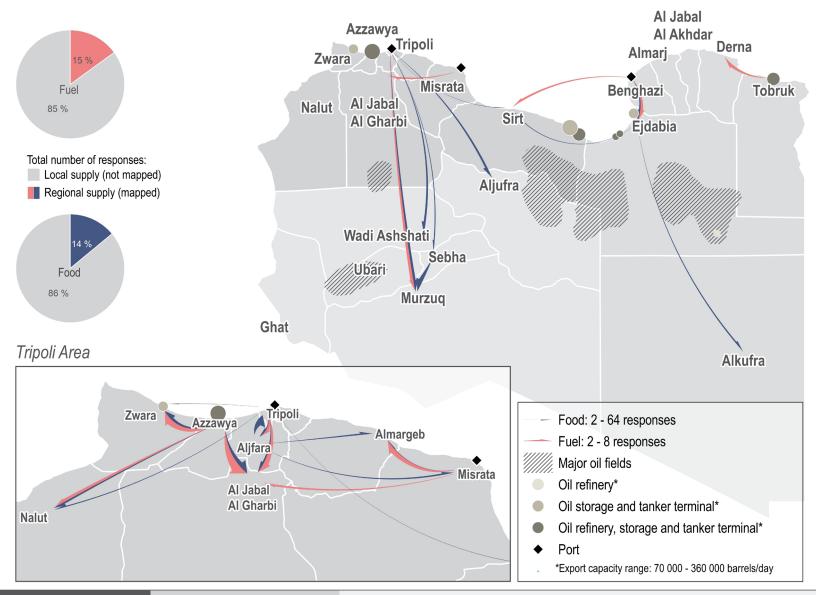


The 'location median' is calculated by first finding the median price of a given item in each assessed location, then taking the median of the resulting set of median prices.

# **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.



# **Appendix**

# PREVIOUS JMMI OUTPUTS Factsheets Datasets

2020

March
February
February
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**

July 2018–October 2019 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 sup port 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**

- <sup>1</sup> Libya's Presidential Council Urges Central to resume foreign currency transaction, Libya Observer, 15th March 2020
- <sup>2</sup> Libya COVID-19 Rapid Market Assessment, REACH, 9th April 2020
- $^3\,\mbox{No}$  wheat and flour shortage in the country says Ministry of Economy, Libya Observer, 8th April 2020
- Libya COVID-19 Rapid Market Assessment, REACH, 9th April 2020
- <sup>5</sup> Oil Spirals Below Zero in 'Devastating Day' for Global Industry, Bloomberg 20th April 2020
- <sup>6</sup> Official rate: Central Bank of Libya (1 April 2020). Parallel market rates: Ewan Libya (1 April 2020). The rates from 1 March 2020 and 1 April 2020 were used for the calculation of the monthly changes.
- $^7{\rm The}$  cooking fuel price is calculated by taking the average of the official LPG median and the unofficial LPG median.
- 8 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 April 2020). Parallel market rates: Ewan Libya (1 April 2020). The rates from 1 March 2020 and 1 April 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.
- $^{\rm 11}$  The 20% float includes expenses on healthcare, medicine, education, utilities, transportation, and communications.
- $^{12}$  The MEB price index was normalised by setting April 2019 as the baseline and dividing each month's price by the price in April 2019 .
- <sup>13</sup> The food prices were normalised by setting May 2019 as the baseline and dividing each month's price by the price in May 2019.
- <sup>14</sup> The hygiene prices were normalised by setting May 2019 as the baseline and dividing each

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 nonprofit, 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.