



INTRODUCTION

The Yemen Joint Market Monitoring Initiative (JMMI) was launched by REACH in collaboration with the Water, Sanitation, and Hygiene (WASH) Cluster and the Cash and Market Working Group (CMWG) to support humanitarian actors with the harmonization of price monitoring among all cash actors in Yemen. The JMMI incorporates information on market systems including price levels and supply chains. The basket of goods to be assessed comprises eight non-food items (NFIs), including fuel, water and hygiene products, reflecting the programmatic areas of the WASH Cluster. Since September 2018, the JMMI tracks all components of the WASH Survival Minimum Expenditure Basket (SMEB).

METHODOLOGY

Data was collected through interviews with vendor Key Informants (KIs), selected by partner organisations from markets of various sizes in both urban and rural areas.

The data collected has been analysed in comparison with the price quotations recorded during the Multi-Agency Joint Cash Study conducted in September 2017, and the Weekly Price Monitoring Initiative (WPMI) which was conducted during the economic blockade of Yemen in November 2017.

More details are available in the Methodology section of the appendix. Findings are indicative for the assessed locations and time frame in which the data was collected.

JMMI MONTHLY FIGURES

Data collection **17 April - 5 May 2019**

- 13 Participating partners
- 49 Districts assessed
- 285 Vendor KIs surveyed

KEY FINDINGS

In April 2019, the Yemeni Riyal (YER) continued to appreciate against the US Dollar (USD), with the USD losing 10.5% on the parallel market.

250
USD/YER
Official
► **0.0%**

511
USD/YER
Parallel market
▼ **10.5%**

571
USD/YER
Previous Parallel Market
Rate March 2019

KEY PRICE FIGURES

The appreciation was accompanied by a stabilization or decrease in the median price of the assessed items. This could be attributed the continued trend of currency appreciation seen over the last 2 months allowing the markets to fully react to the Yemeni Riyal's growth. This was seen for all goods, except water trucking which saw a large increase in price.

Petrol Price	365 YER	►	0.0%
Diesel Price	430 YER	►	0.0%
Bottled Water Price	120 YER	►	0.0%
Treated Water Price	105 YER	▼	-8.2%
Water Trucking Price	1,875 YER	▲	+25.0%

WASH SMEB FIGURES

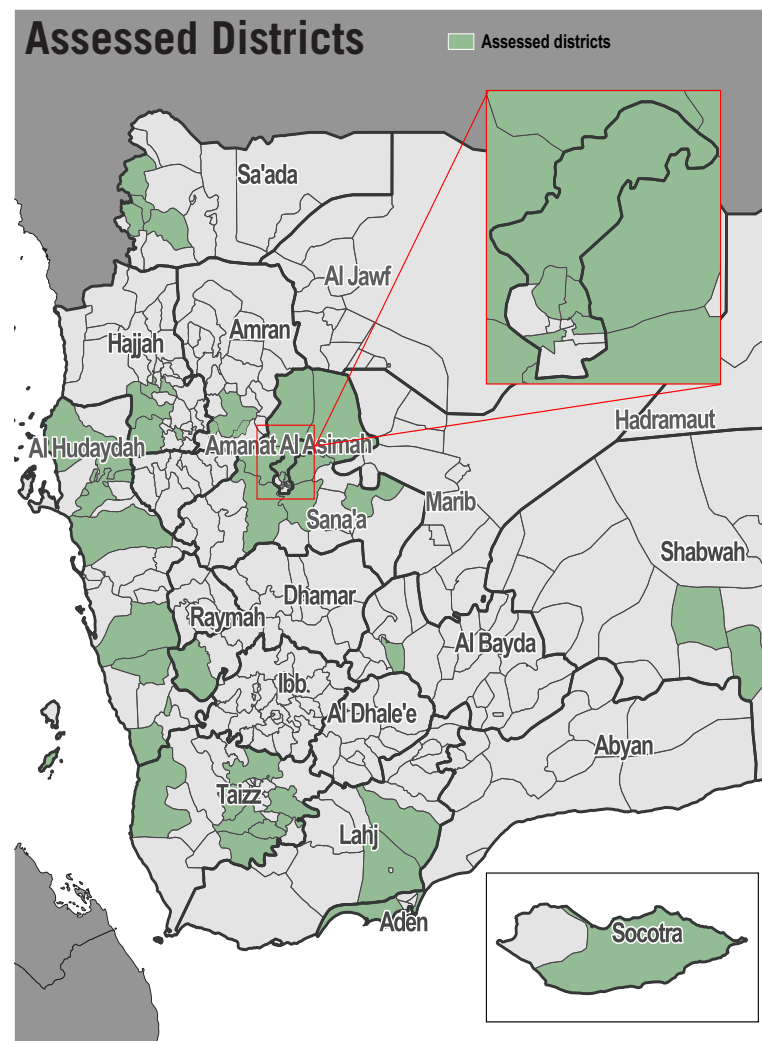
The median cost for the WASH SMEB was 10,421 YER, marking an increase of 12.3% from the cost observed in March 2019, largely due to the increased prices of water trucking.

April: 10,421 YER ▲ 1,139 YER +12.3%

SUPPLY OVERVIEW

The median restocking time reported for fuel and WASH goods remained the same or declined in most districts, except for fuel restocking in Amanat al Asimah and Sana'a. Both districts saw a sharp increase in the number of days to restock fuel when compared against figures from the March JMMI.

Overall, prices for fuel and WASH goods originating in Aden were shown to be cheaper than those originating in al Hudaydah. The only exception is sanitary napkins, which were 100 YER cheaper if they originated from al Hudaydah.



WASH SMEB

Soap	1.05 kg
Laundry powder	2 kg
Sanitary napkins	20 units
Water trucking	3.15 m ³

OTHER ASSESSED ITEMS

Petrol	1 liter
Diesel	1 liter
Treated water	10 liter
Bottled water	0.75 liter

WASH SMEB COST OVERVIEW

The **WASH Survival Minimum Expenditure Basked (SMEB)** represents the minimum culturally adjusted group of WASH items required to support a Yemeni family of eight for a month.

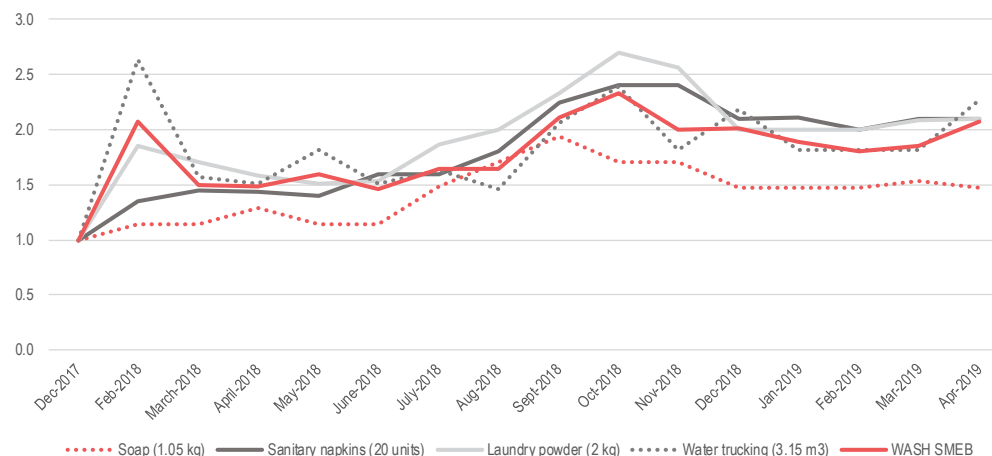
The cost of the WASH SMEB can be used as a proxy for the financial burdens, relative to WASH items, a household is facing in different locations. The WASH SMEB components were defined by the CMWG in consultation with relevant sector leads.

MEDIAN COST OF WASH SMEB IN APRIL

10,421 YER

WASH SMEB PRICE INDEX

Since September 2017 (normalized, September 2017 = 1.00)



Change since March 2019 ▲ **1,139 YER**
+12.3%

Change since September 2017 ▲ **5,399 YER**
+107.5%

MEDIAN WASH SMEB PRICES, BY GOVERNORATE, 1-Month and 6-Months (YER)

Governorate	Soap (10.5 kg)	Laundry powder (2 kg)	Sanitary napkins (20 units)	Water trucking (3.15 m³)	WASH SMEB Apr-19	Change since Mar-19	Change since Oct-18
Aden	1,418	1,750	1,025	12,994	17,187	+16.5%	-27.3%
al Bayda	1,365	3,000	1,260	14,175	19,800	NA*	+33.3%
al Hudaydah	1,365	2,000	700	5,906	9,971	-4.2%	+5.9%
Amanat al Asimah	1,155	2,000	1,100	4,199	8,454	+5.9%	-10.5%
Amran	1,575	2,000	1,626	3,308	8,509	+4.8%	-13.0%
Dhamar	1,260	2,800	1,500	11,025	16,585	+30.4%	-15.1%
Hajjah	1,549	2,000	1,050	9,844	14,443	+2.5%	+10.3%
Lahj	1,286	2,500	1,050	3,150	7,986	-15.8%	+8.7%
Sa'ada	1,313	3,300	1,400	3,465	9,478	+6.7%	-11.4%
Sana'a	1,575	2,000	1,000	4,725	9,300	+5.8%	-5.4%
Shabwah	1,260	2,400	1,000	6,237	10,897	-18.3%	NA*
Socotra	1,575	2,600	1,300	2,520	7,995	-8.3%	-16.3%
Taizz	1,470	2,100	1,050	6,300	10,920	+36.9%	-22.9%

*Data was not collected for these districts during these time periods.

CHALLENGES FOR WASH VENDORS*

Price inflation	83.8%	
Transportation issues	23.4%	
Insecurity and instability	19.8%	
Liquidity shortage	18.8%	
Supply shortage	12.2%	
Shortage of demand	9.6%	
Other	5.1%	
No constraints	3.9%	
Government regulations	2.0%	

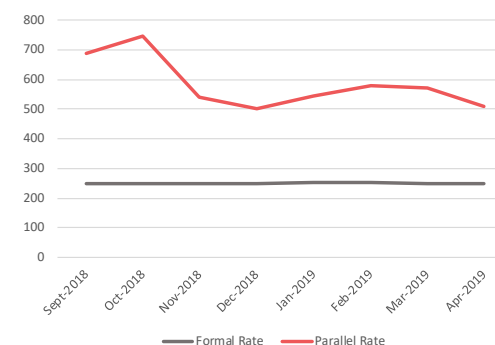
*Values do not add up to 100% as vendor KIs were allowed to select multiple options.

PAYMENT MODALITIES ACCEPTED: WASH*

Cash	99.0%	
Credit	5.1%	
Credit/debit card	3.6%	
Mobile money	1.0%	
Vouchers	0.5%	

* Payment modalities can add up to more than 100%

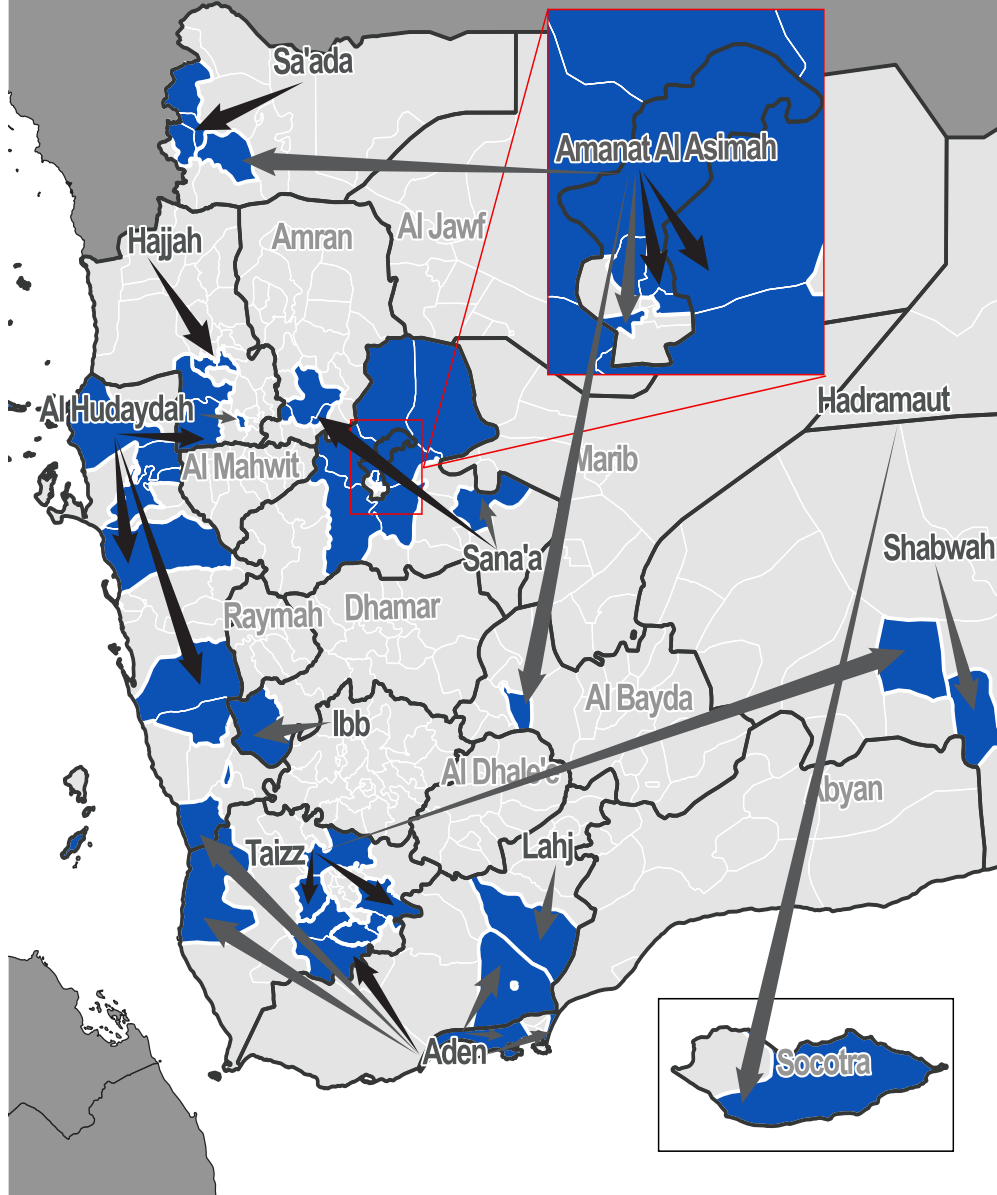
EXCHANGE RATE INDEX



WASH SMEB Supply Chain Overview

Supply destination

- ➔ One district supplied
- ➔ Two or more districts supplied
- ▢ Districts without a main supplier
- ▢ Districts with a main supplier

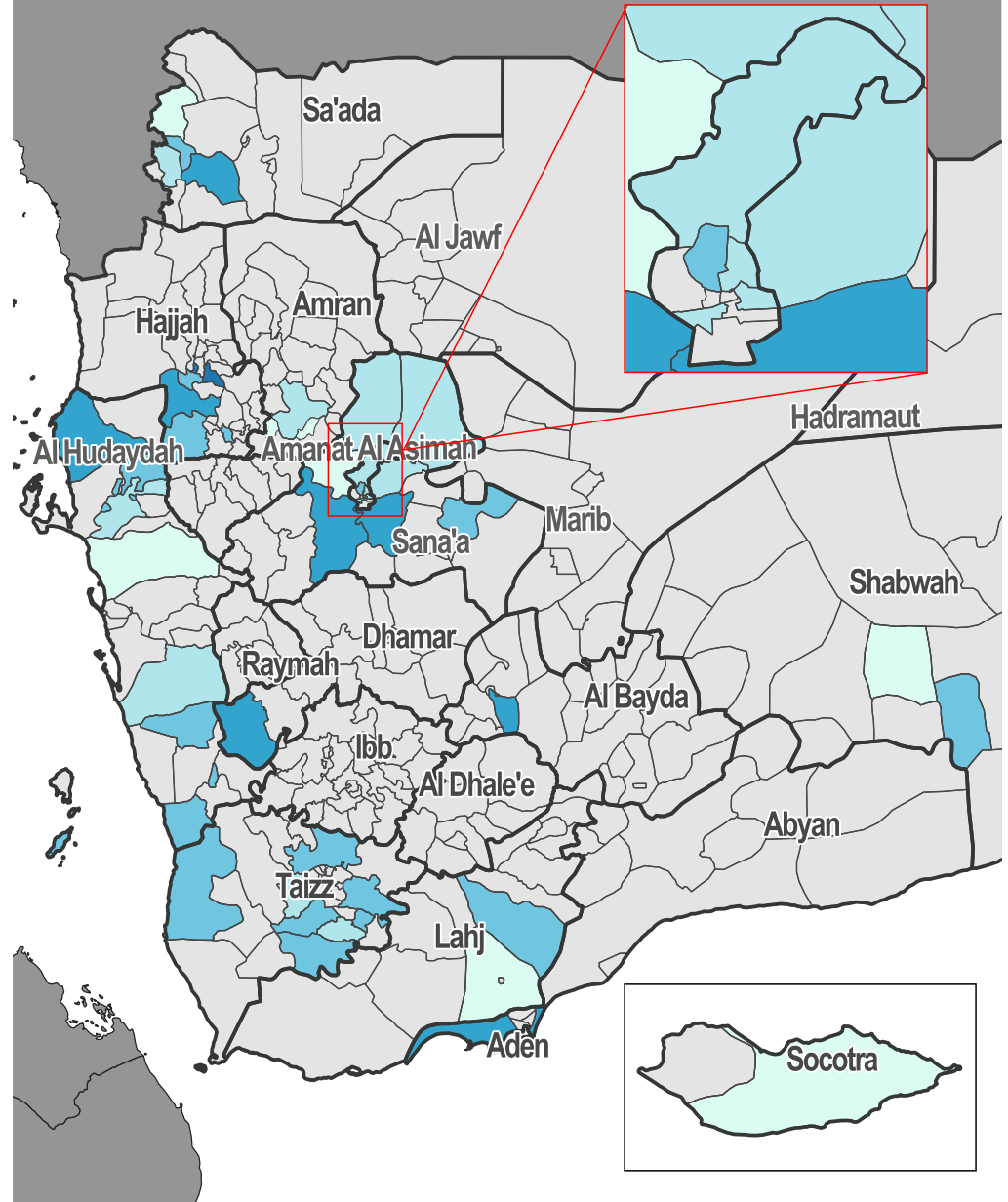


*The map shows WASH SMEB supply chain inside the same governorate and towards other governorates. Districts without a main supplier are those districts where vendor KIs could not identify the origin of the WASH Items they sold.

Median Cost Of WASH SMEB

Median WASH SMEB Cost (YER)

- 20,001 - 26,825
- 15,001 - 20,000
- 10,001 - 15,000
- 8,001 - 10,000
- 5,673 - 8,000
- Not assessed



Note: only districts with data for the complete SMEB were taken into account for this map.

PRICE MONITORING OVERVIEW FOR YEMEN

MEDIAN PRICE LEVELS, PER ITEM, PER MONTH (YER)*

Item	September 2017 (baseline)^	November 2017^	December 2018	January 2019	February 2019	March 2019	April 2019	% Change (Mar-Apr)
Diesel	235	394	448	410	375	430	430	0.0%
Petrol	275	349	418	410	325	365	365	0.0%
Treated water	NA	175	100	120	100	114	105	-7.9%
Bottled water	70	100	120	120	110	120	120	0.0%
Soap	88	NA	130	130	130	135	130	-3.7%
Sanitary napkins	250	NA	518	528	500	525	525	0.0%
Laundry powder	50	NA	100	100	100	105	105	0.0%
Water trucking	825	1,700	1,800	1,650	1,500	1,500	1,875	+25.0%

* Price variations and the percentage change are calculated using data from markets that were assessed in both consecutive months.

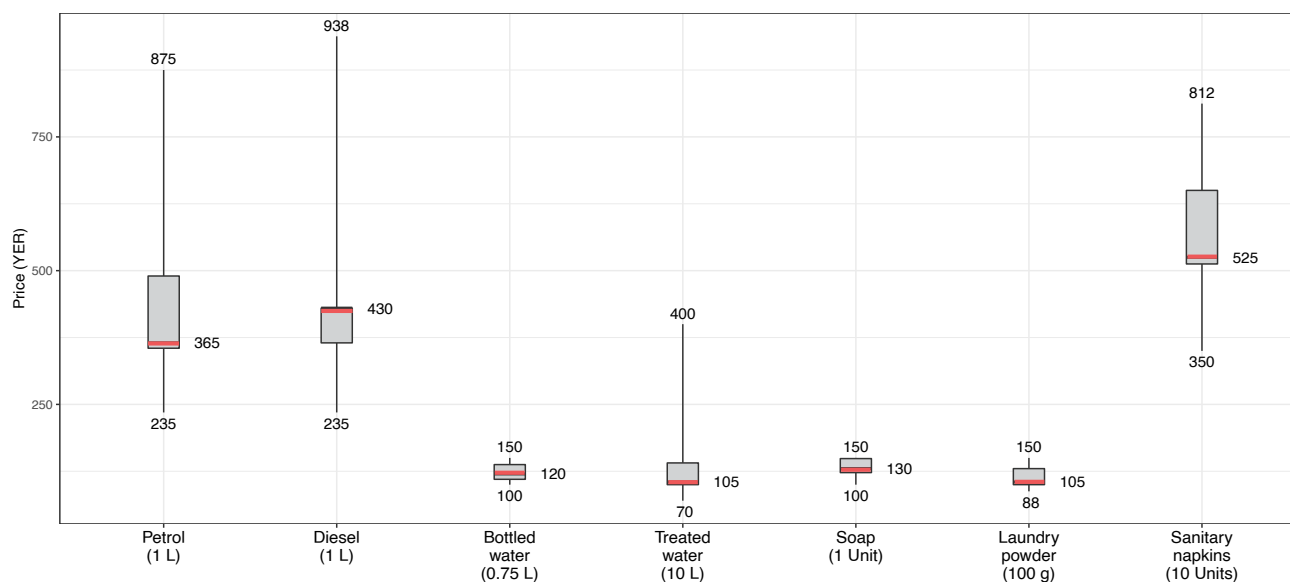
^ Price levels for September 2017 are the price quotations recorded during the Multi-Agency Joint Cash Study, while prices for November 2017 were recorded during the Weekly Price Monitoring Initiative conducted by the WASH Cluster.

~ Treated water prices for September and November 2017 were for 20L, while the JMMI collects prices for 10L.

MEDIAN PRICE PER GOVERNORATE (YER)

Governorate	Petrol (1L)	Diesel (1L)	Bottled water (0.75L)	Treated water (10L)	Soap (1 Unit)	Laundry powder (100g)	Sanitary napkins (10)	Water trucking (1m³)
Aden	315	365	138	138	135	88	513	4,125
al Bayda	750	700	120	100	130	150	630	4,500
al Hudaydah	430	430	120	110	130	100	350	1,875
Amanat al Asimah	365	430	100	80	110	100	550	1,330
Amran	365	430	110	375	150	100	812	1,050
Dhamar	875	938	140	400	120	140	750	3,500
Hajjah	650	440	120	125	148	100	525	3,125
Lahj	315	360	150	130	123	125	525	1,000
Sa'ada	485	400	145	100	125	165	700	1,100
Sana'a	365	430	100	70	150	100	500	1,500
Shabwah	355	358	100	100	120	120	500	1,980
Socotra	235	235	130	NA	150	130	600	800
Taizz	413	408	123	100	140	105	525	2000

DISTRIBUTION OF PRICES ACROSS YEMEN



PAYMENT MODALITIES ACCEPTED: FUEL VENDORS*

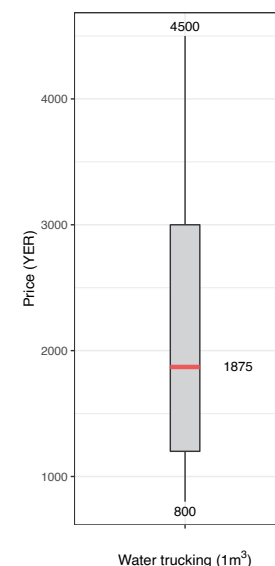
Cash	99.3%	
Credit/debit cards	2.6%	
Mobile money	2.0%	
Credit	1.3%	
Vouchers	0.7%	
Other	0.7%	

* Payment modalities can add up to more than 100%

PAYMENT MODALITIES ACCEPTED: WATER TRUCKING*

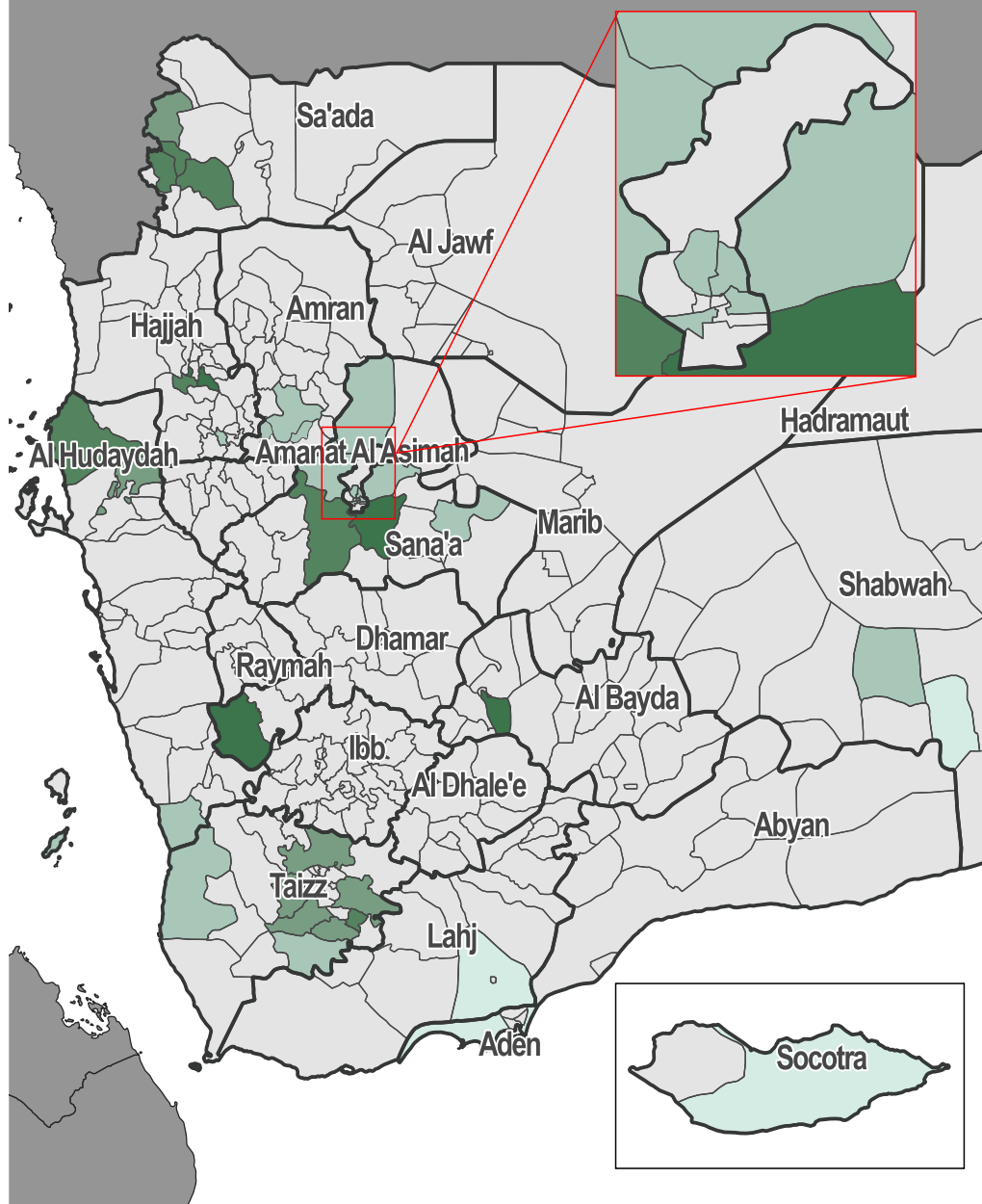
Cash	100.0%	
Credit	2.3%	
Mobile money	1.5%	
Credit/debit cards	0.8%	

* Payment modalities can add up to more than 100%



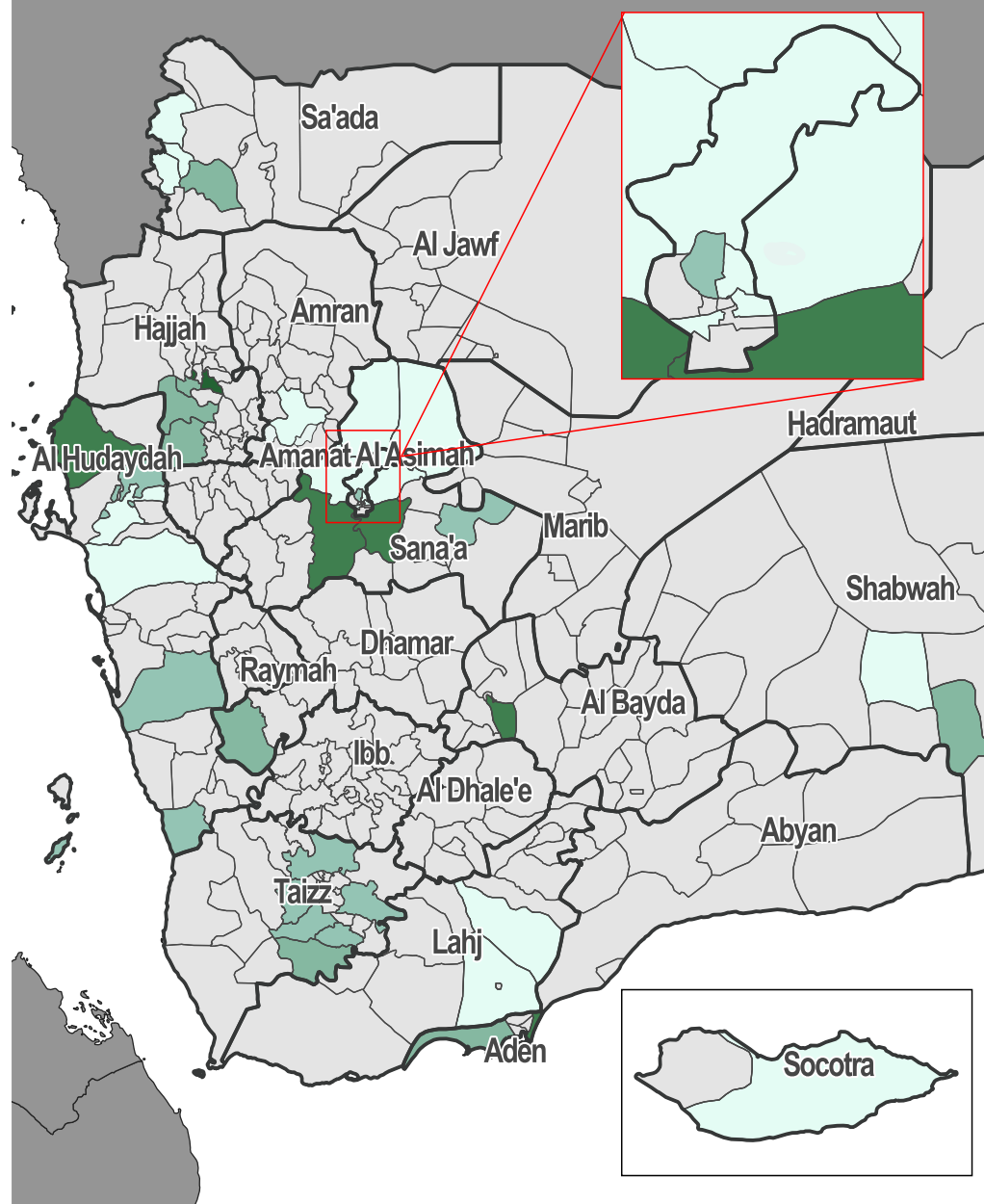
Petrol Prices

Median petrol prices per district per liter in (YER)



Water Trucking Prices

Median water trucking prices per district per cubic meter in (YER)



Note: the differences in the number of districts shown between the two maps for fuel and water prices are due to the methodology-stipulated requirement for a minimum of three price quotations per market per district.

SUPPLY CHAIN OVERVIEW FOR YEMEN

AVERAGE RESTOCKING TIME: DAYS

-CHANGE FROM MARCH IN (-)-

Governorate	Fuel Items	WASH Items
Aden	2 (-3)	4 (-2)
al Bayda	2 (NA)	5 (NA)
al Hudaydah	4 (4)	5 (-1)
Amanat al Asimah	22 (+17)	5 (0)
Amran	6 (+1)	2 (0)
Dhamar	8 (0)	5 (0)
Hajjah	4 (-3)	4 (-6)
Lahj	7 (-1)	6 (-2)
Sa'ada	7 (+5)	7 (0)
Sana'a	24 (+11)	3 (+1)
Shabwah	3 (+1)	2 (+1)
Socotra	3 (-1)	2 (0)
Taizz	3 (-2)	3 (-2)

MOST REPORTED CONSTRAINTS FOR: FUEL VENDORS*

Price inflation	88.8%	<div></div>
Supply shortage	29.6%	<div></div>
Insecurity and instability	28.9%	<div></div>
Transportation issues	25.0%	<div></div>
Shortage of demand	24.3%	<div></div>
Liquidity shortage	18.4%	<div></div>
Government regulations	5.9%	<div></div>
Other	5.3%	<div></div>
No constraints	3.9%	<div></div>
Refused to answer	0.7%	<div></div>

*Values do not add up to 100% as vendor KIs were allowed to select multiple options.

OVERVIEW FOR WATER TRUCKING

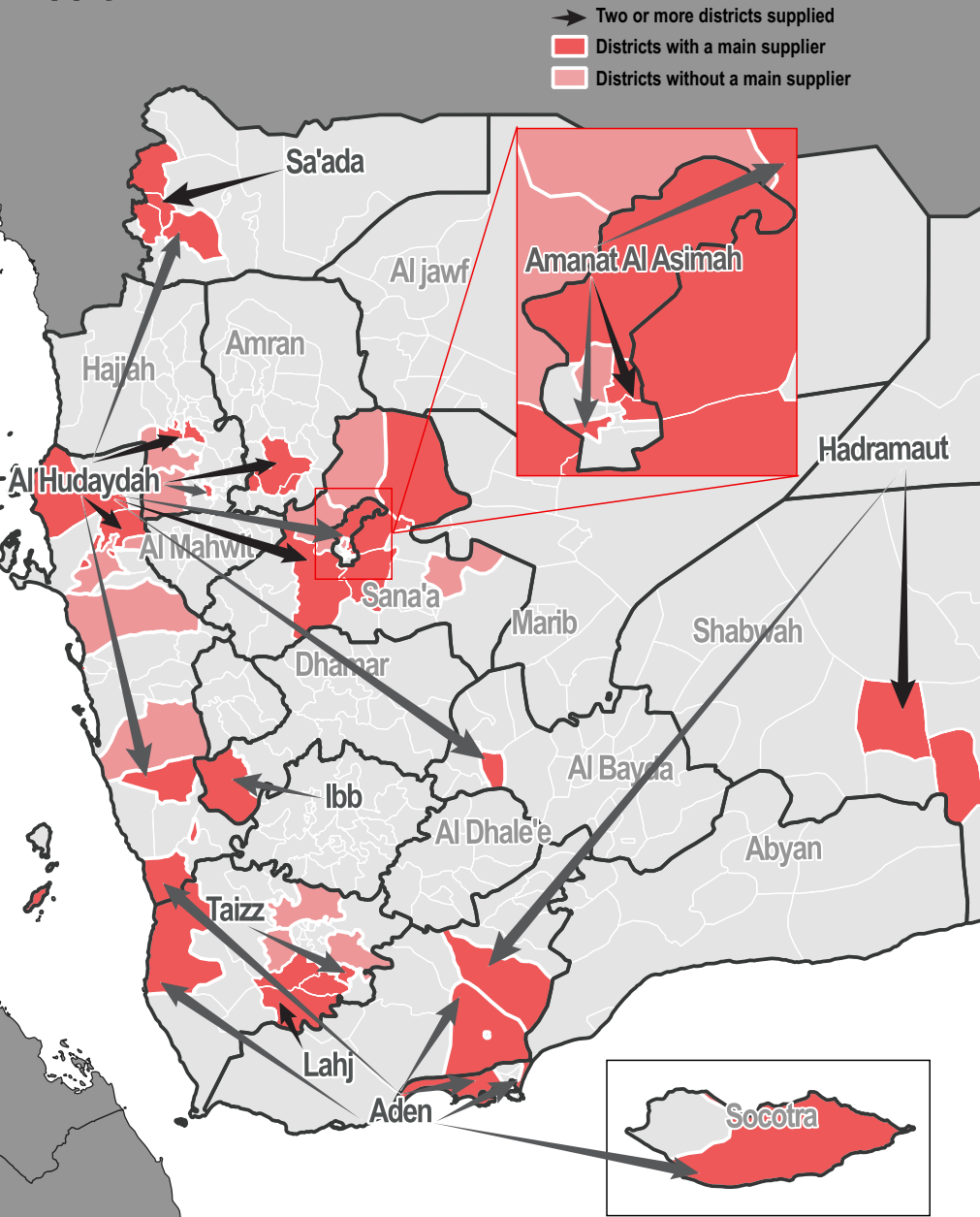
- 70%** of water vendor KIs stated that they charged delivery costs based on the distance between the water source and the delivery point. The median additional price for 5km is **6,500 YER** and **10,000 YER** for 10 km.
- 82%** of water vendor KIs stated that they sell non-chlorinated water.
- 15%** of water vendor KIs stated that they sell chlorinated water. An additional **3%** reported being unaware if the water they sold was chlorinated.
- 91%** of water vendor KIs reported sourcing water from a pumping station or a borehole.
- 6%** of water vendor KIs reported sourcing water from a treatment station.
- 3%** of water vendor KIs reported sourcing water from a spring.

CONSTRAINTS AND CHALLENGES

When asked about the top constraints, fuel vendors faced in conducting their business, KIs reported price inflation, supply shortages, and insecurity as their top three issues. These issues have led to a rise in a black market for fuel in certain areas.

Other vendor KIs reported an unwillingness to buy large quantities of goods as consumers were not able to conduct purchases, causing a build-up of stock.

Petrol And Diesel Main Supply Chain Overview*

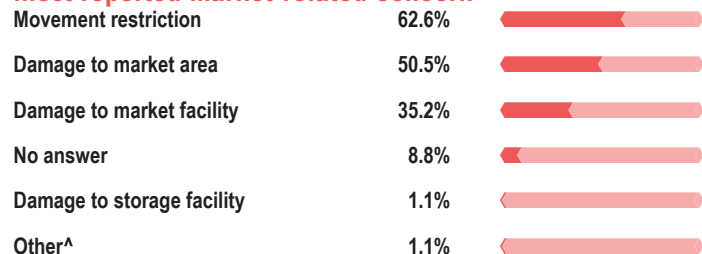


*The map shows fuel supply chain inside the same governorate and towards other governorates. Districts without a main supplier are those districts where vendor KIs could not identify the origin of the fuel they sold.

MARKET-RELATED CONCERN AFFECTING VENDOR CAPACITY TO CONDUCT BUSINESS

When asked if they faced any market-related concern that would prevent them from conducting their business, 65% of the assessed KIs responded that they did not face any concern compared to 35% who responded that they did. Of those vendors who experienced market related concerned, the most reported answers are as follows:

Most reported market-related concern*^



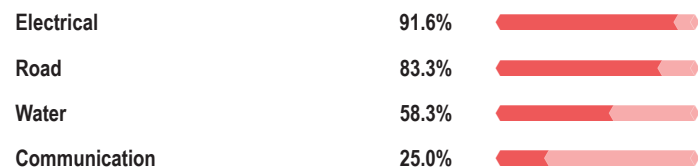
*Values do not add up to 100% as vendor KIs were allowed to select multiple options.

^ Repairs to roads are causing transportation delays and additional costs to be incurred.

MOST REPORTED DAMAGED INFRASTRUCTURE AFFECTING VENDOR CAPACITY TO CONDUCT BUSINESS*

Vendor KIs who reported "damage to the market area" and "damage to the market facility" as concerns affecting their capacity to run their businesses, were then asked which parts of the infrastructure were damaged the most.

Most reported damaged infrastructure*



*Values do not add up to 100% as vendor KIs were allowed to select multiple options.

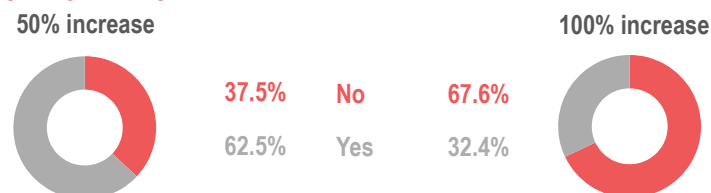
MARKET TAKE AWAYS

Vendor KIs reported additional cost of fuel as a major factor in the increased prices of goods, as well as availability of shipments. As reported by interviewed KIs, many fuel services are under-supplied, causing large price fluctuations, in addition to an increase in black market activity. The ability of supply chains to adapt to fuel shortages could have ripple effects on the greater economy, as increased fuel costs could be passed on to consumers.

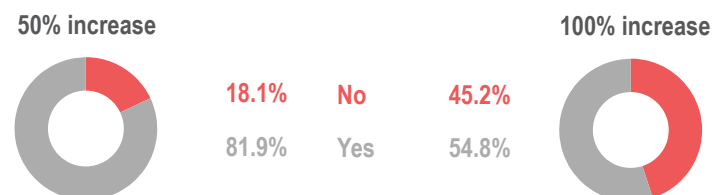
VENDOR CAPACITY TO RESPOND TO A SUDDEN INCREASE IN DEMAND

To understand vendors' capacity to cope with sudden increases in the demand of water trucking, fuel, and WASH items, we asked them if they would be able to increase their stock by 50% and by 100% respectively. KIs are able to better absorb a 50% increase in demand compared to a 100% increase in demand regardless of the item in question.

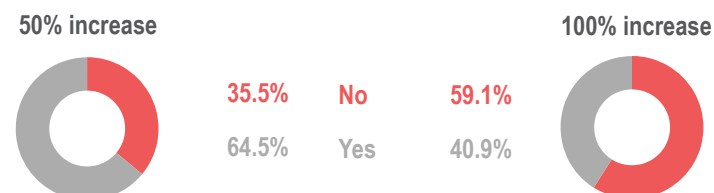
Vendor capacity to respond to a 50% and 100% increase in demand of fuel items



Vendor capacity to respond to a 50% and 100% increase in demand of WASH items



Vendor capacity to respond to a 50% and 100% increase in demand of water trucking



APPENDIX

WHAT IS THE INTERSECTORAL OR CASH AND MARKET WORKING GROUP?

With the emergence of the conflict in 2014, humanitarian actors in Yemen began using cash and vouchers as a response tool to meet the immediate needs of the Yemeni population. The CMWG was established to provide a platform for discussion and setting standards/recommendations on cash and market-based responses (inclusive of cash and vouchers) for the cash actors in Yemen. The JMMI was developed by the CMWG, the WASH Cluster, and REACH in order to harmonize price monitoring amongst WASH actors in Yemen.

ADDITIONAL INFORMATION ON METHODOLOGY

To be assessed by the JMMI, markets must be either a single permanent market, or a local community where multiple commercial areas are located in close proximity to one another. When possible, markets/shops are selected within a single geographical location, where there is at least one wholesaler operating in the market, or multiple areas of commerce within the same geographical location when it is too small, to provide a minimum of three price quotations per assessed item.

Participating organisations train their enumerators on the JMMI methodology and data collection tools using standard training materials developed by REACH. Each month, enumerators conduct KI interviews with market vendors to collect three price quotations for each item from the same market in each district. In addition to price levels, vendors are asked about the location of their supplier, the number of days it takes to restock the items, and the constraints they are facing in purchasing and selling the items in question. Additional questions are included for water trucking, to gauge the impact of delivery distance upon price level.

Following data collection, REACH compiles and cleans all partner data, normalising prices and cross-checking outliers. The cleaned data is then analysed by commodity

and by governorate. To illustrate local variations in prices and availability, REACH uses the collected data to map the price of each type of item in each district. REACH also calculates the WASH SMEB (Survival Minimum Expenditure Basket), which is composed of four items: soap (1.05 kg), laundry powder (2 kg), sanitary napkins (20 units) and water trucking (3.15 m3). The cleaned data sets are available on the [REACH Resource Centre](#) and are distributed to all participating partners, as well as to relevant clusters and the broader humanitarian community.

LIMITATIONS

Due to issues of access and security across Yemen, the districts included in the JMMI vary on a monthly basis, and as such there are sometimes a limited number of districts for which trends can be assessed over time. Governorate level data is aggregated from the respective districts assessed in a given month, and so the findings are not representative of individual markets. Finally, the market monitoring process has been coordinated remotely by REACH, which inherently presents some challenges in terms of coordination and follow-up with partners. Participating organisations are therefore requested to adopt harmonised data collection methodologies and tools to ensure that the data uploaded is as accurate as possible.

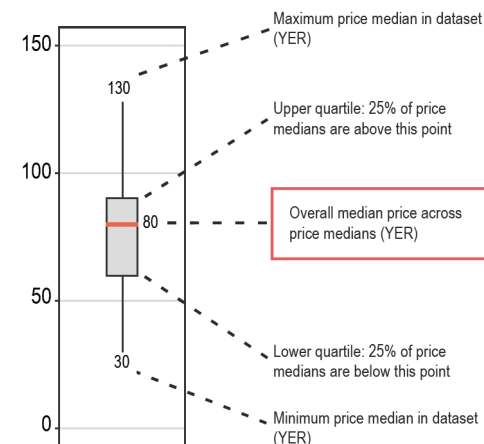
CALCULATION OF DISTRICT AND GOVERNORATE MEDIAN PRICE

The calculation of the aggregated median price for districts and governorates is done following a stepped approach. Firstly, the median of all the price quotations related to the same market is taken. Secondly, the median quotation from each market is aggregated to calculate the district median. Finally, the median quotation from each district is aggregated to calculate the governorate median. Additionally, district and governorate median prices and percentage change from one month to another are calculated only on data from markets that were assessed in both consecutive months. Therefore, part of the percentage variation should be attributed to changes in monthly coverage when registered.

ABOUT REACH

REACH is a joint initiative that facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. By doing so, REACH contributes to ensuring that communities affected by emergencies receive the support they need. All REACH activities are conducted in support to and within the framework of inter-agency aid coordination mechanisms. For more information, please visit our website at www.reach-initiative.org, contact us directly at yemen@reach-initiative.org or follow us on Twitter at [@REACH_info](https://twitter.com/REACH_info).

How to read a box plot



PARTICIPATING PARTNERS INCLUDE

