Yemen Joint Market Monitoring Initiative
November 2018

WASH Cluster Water Sanitation Hygiene

CMWG | Intersector Cash and Market Working Group

REACH Informing more effective humanitarian action

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 **21-30 November 2018**
- **15** Participating partners
- **64** Districts assessed
- **353** Vendor KIs surveyed

KEY FINDINGS

The value of the US dollar exchange rate registered on the parallel market was 540 YER, showing an depreciation of 27.5% compared to the value registered in October.

250 USD/YER	540 USD/YER	745 USD/YER
Official	*Parallel market*	*Parallel market*
▶ 0.0%	▼ 27.5%	*October 2018*

KEY PRICE FIGURES

The depreciation was accompanied by an overall decrease in the median price of assessed items. Treated water and water trucking experienced the greatest decrease: 22.6% and 24.1% respectively.

Petrol Price	**550 YER**	▼ 6.0%
Diesel Price	**550 YER**	▼ 5.2%
Bottled Water Price	**150 YER**	▶ 0.0%
Treated Water Price	**135 YER**	▼ 22.6%

WASH SMEB FIGURES

The median cost for the WASH SMEB was 10,060 YER, with a reduction of 14% compared to the cost observed in October.

November	10,060 YER	▼ 1,636 - 14%

SUPPLY OVERVIEW

Despite the overall reduction in prices, the districts supplied by the governorate of al Hudaydah showed higher prices compared to those supplied by the governorate of Aden.

The median restocking time reported by fuel vendor KIs was 5 days compared to 7 days reported in October, and WASH items median restocking time was 3 days compared to 4 days as reported in October.

ASSESSED DISTRICTS

Assessed districts

WASH SMEB / OTHER ASSESSED ITEMS
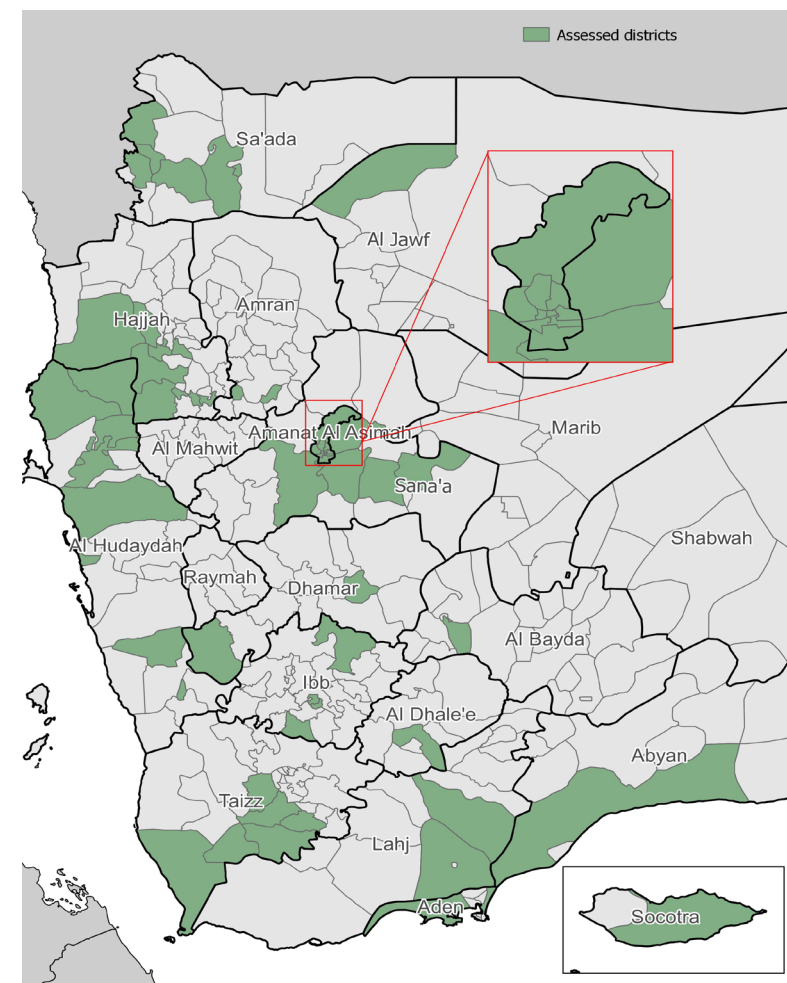
WASH SMEB		OTHER ASSESSED ITEMS	
Soap	1.05 kg	Petrol	1 liter
Laundry powder	2 kg	Diesel	1 liter
Sanitary napkins	20 units	Treated water	10 liter
Water trucking	3.15 m³	Bottled water	0.75 liter

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

10,060 YER

Change since October 2018	Change since September 2017
▼ 1,636 -14%	▲ 5,037 +100.3%

PAYMENT MODALITIES ACCEPTED*

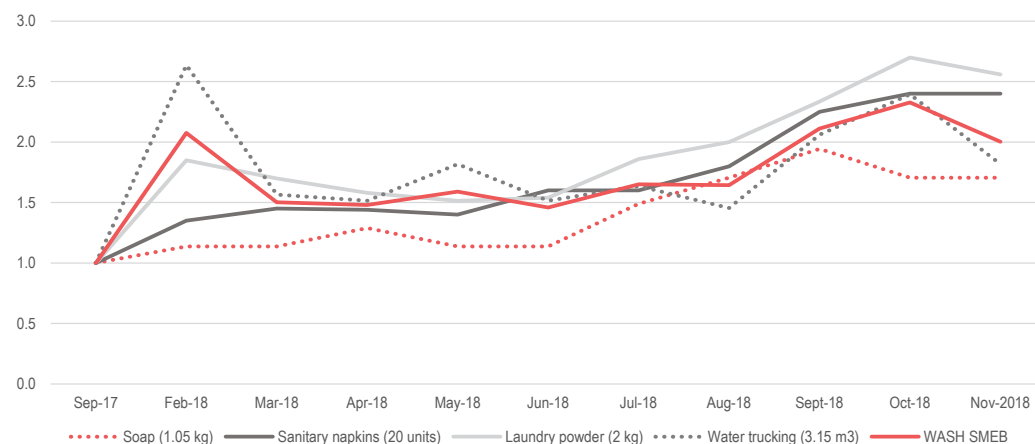|		
Cash	100%	
Credit	3%	
Bartering	3%	
Mobile money	2%	
Credit/Debit cards	1%	

Payment modalities can add up to more than 100%

MEDIAN WASH SMEB PRICES, BY GOVERNORATE (IN YER)

Governorate	Soap (10.5 kg)	Laundry powder (2 kg)	Sanitary napkins (20 units)	Water trucking (3.15 m³)	WASH SMEB Nov-18	Change since Oct-18
Abyan	1,575	2,000	1,100	6,300	10,975	+2%
Aden	1,800	3,318	1,225	9,450	15,793	-33%
al Bayda	1,260	3,300	1,090	6,615	12,265	-17%
al Dhale'e	1,050	2,000	1,100	7,875	12,025	-29%
al Hudaydah	1,800	2,600	1,000	6,300	11,700	+24%
al Jawf	1,654	2,000	1,100	4,725	9,505	-21%
Amanat al Asimah	958	2,600	1,200	4,199	8,957	-5%
Amran	1,440	2,182	1,300	5,670	10,592	8%
Dhamr	1,654	2,550	1,305	4,843	10,352	-47%
Hajjah	1,800	2,600	1,100	4,725	10,225	-22%
Ibb	1,680	2,400	900	7,560	12,540	+4%
Laj	1,800	1,818	900	5,513	10,031	+36%
Raymah	1,218	2,139	1000	9,450	13,807	NA
Sa'ada	1,484	2,600	1,250	2,363	7,697	-28%
Sana'a	1,680	2,500	1,200	4,331	9,711	-1%
Socotra	1,260	2,800	1,400	3,780	9,240	-3%
Taizz	1,260	2,100	1,200	6,300	10,860	-23%

WASH SMEB PRICE INDEX
Since September 2017 (normalized, September 2017 = 1.00)

Soap (1.05 kg) · Sanitary napkins (20 units) · Laundry powder (2 kg) · Water trucking (3.15 m3) · WASH SMEB

MAIN DISTRICTS MONTH-TO-MONTH CHANGES IN MEDIAN WASH SMEB COST

Aden
October		November
23,655 YER	▼ 33%	15,793 YER

al Hudaydah
October		November
9,413 YER	▲ 24%	11,700 YER

Taizz
October		November
14,161 YER	▼ 23%	10,860 YER

Amanath al Asimah
October		November
9,449 YER	▼ 5%	8,957 YER

WASH SMEB PRICE TREND
(normalized, April 2018 = 1)

al Hudaydah · Aden · Amanat al Asimah · Taizz
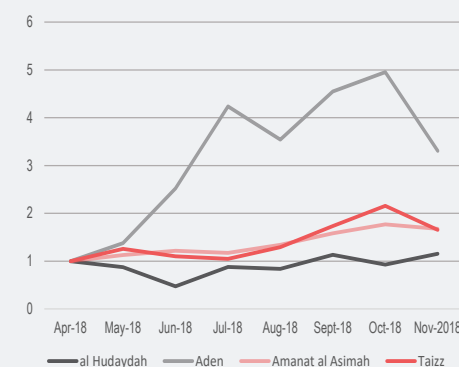
WASH SMEB Supply Chain Overview

Supply Destination

→ One district supplied

→ Two or more districts supplied

Districts without a main supplier

Districts with a main supplier

Vendor did not answer

Sa'ada

Amanat Al Asimah

Hajjah

Amran

Al Jawf

Marib

Al Mahwit

Sana'a

Al Hudayhah

Dhamar

Raymah

Shabwah

Al Bayda

Ibb

Al Dhale'e

Abyan

Taizz

Lahj

Aden

Socotra
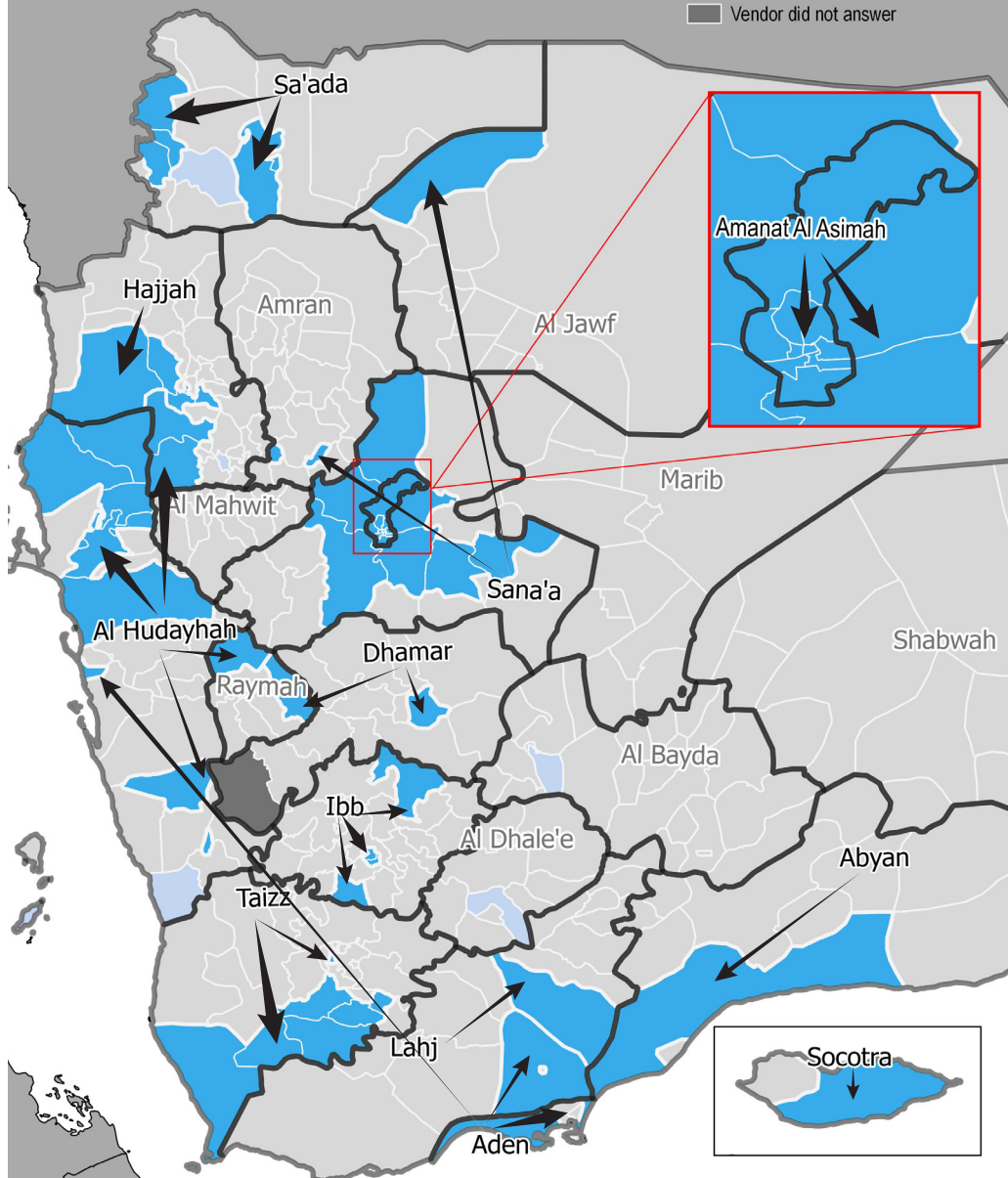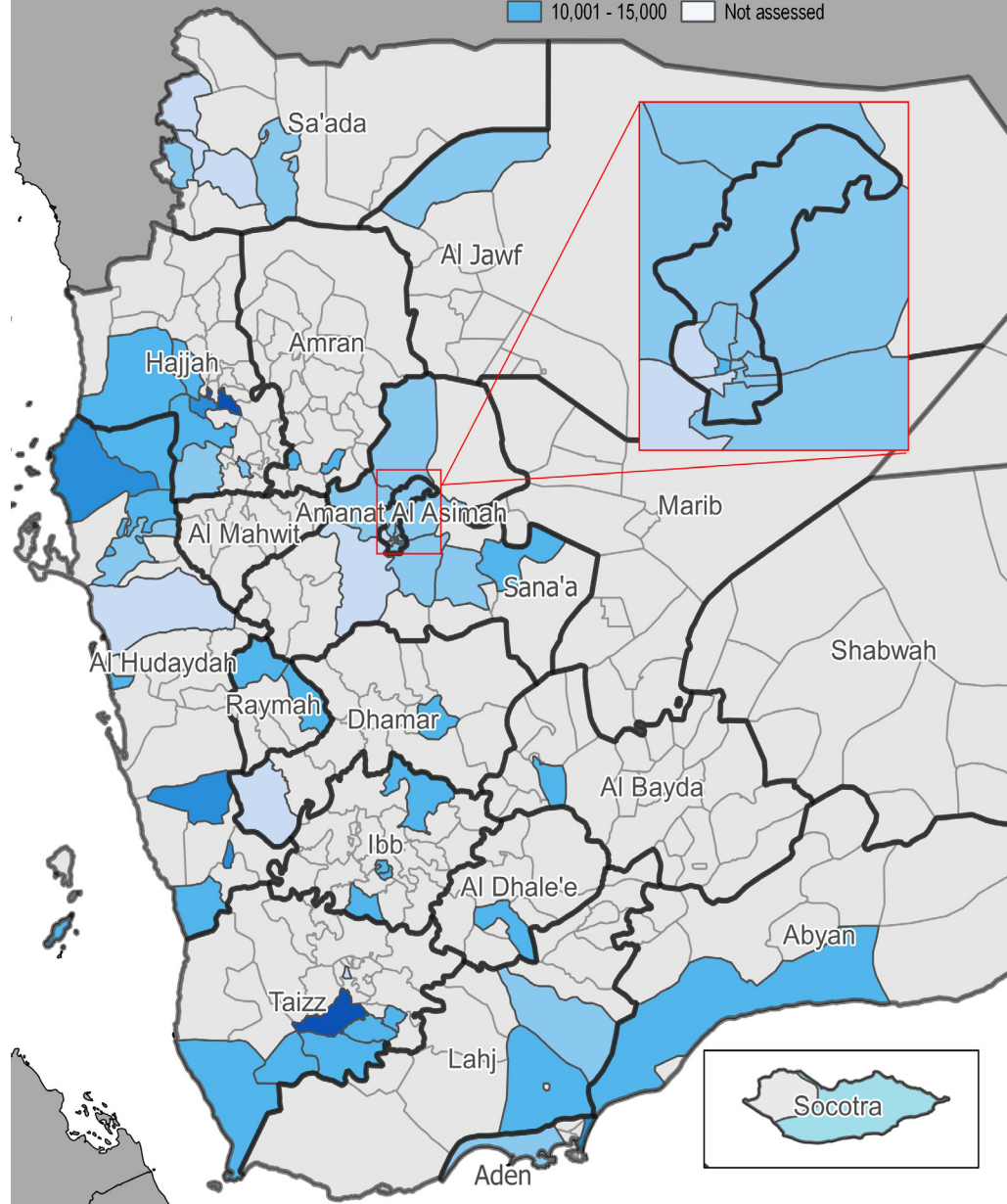
Note: only complete SMEB are taken into account.

Median cost of WASH SMEB Cost

Median WASH SMEB Cost (YER)

25,001 - 31,840   8,001 - 10,000

15,001 - 25,000   4,474 - 8,000

10,001 - 15,000   Not assessed

Sa'ada

Al Jawf

Hajjah

Amran

Amanat Al Asimah

Al Mahwit

Sana'a

Marib

Al Hudaydah

Raymah

Dhamar

Shabwah

Al Bayda

Ibb

Al Dhale'e

Abyan

Taizz

Lahj

Aden

Socotra

PRICE MONITORING OVERVIEW FOR YEMEN
MEDIAN PRICE LEVELS, PER ITEM, PER MONTH (IN YER)*

Item	September 2017 (baseline)^	November 2017^	August 2018	September 2018	October 2018	November 2018	% Change (Oct-Nov)
Diesel	**235**	394	400	578	580	550	-5.2%
Petrol	**275**	349	415	656	585	550	-6.0%
Treated water	**NA**	175 ¬	123	140	155	120	-22.6%
Bottled water	**70**	100	115	140	150	150	0.0%
Soap	**88**	NA	150	171	150	150	0.0%
Sanitary napkins	**250**	NA	450	563	600	600	0.0%
Laundry powder	**50**	NA	100	117	135	128	-5.2%
Water trucking	**825**	1,700	1,200	1,700	1,975	1,500	-24.1%

* Price variations and the percentage change are calculated using data from markets that were assessed in both consecutive months.
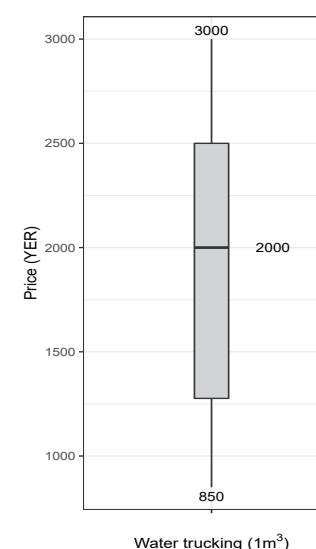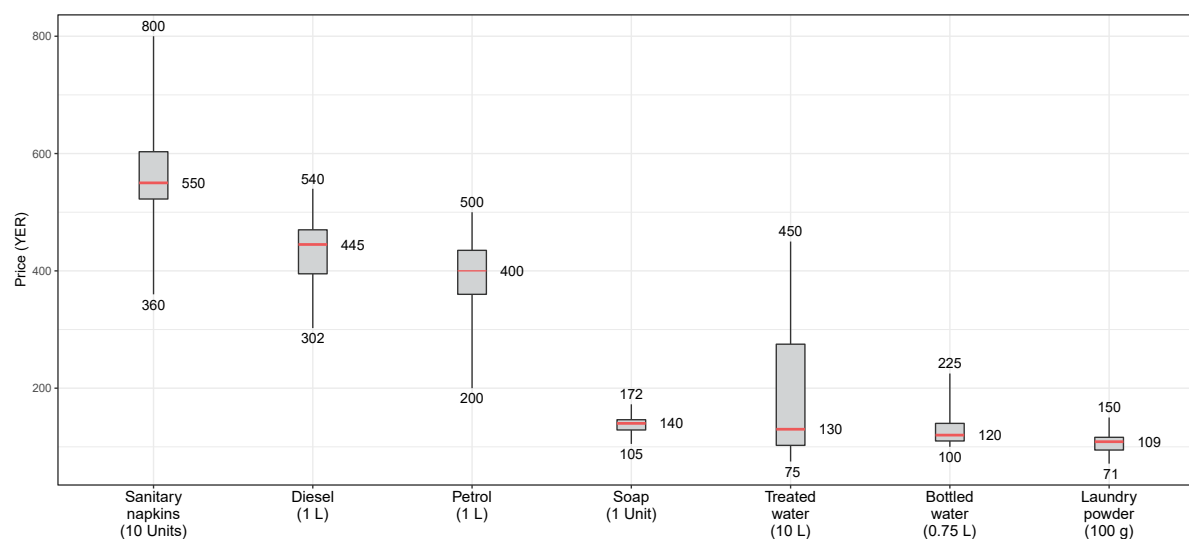^ Price levels for September 2017 are the price quotations recorded during the Multi-Agency Joint Cash Study, while prices for November 2017 were recorded during the Weekly Price Monitoring Initiative conducted by the WASH Cluster.
¬ Treated water prices for September and November 2017 were for 20L, while the JMMI collects prices for 10L.
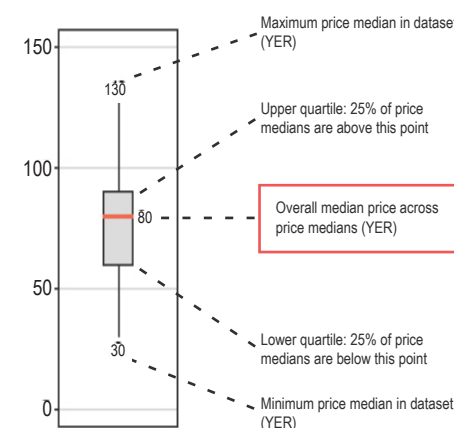
MEDIAN PRICE PER GOVERNORATE (IN YER)

Governorate	Petrol (1L)	Diesel (1L)	Bottled water (0.75L)	Treated water (10L)	Soap (1 Unit)	Laundry powder (100g)	Sanitary napkins (10)	Water trucking (1m³)
Abyan	780	750	150	100	150	100	550	NA
Aden	390	460	150	98	172	166	613	3,000
al Bayda	575	578	225	300	120	165	545	2,100
al Dhale'e	383	368	150	100	100	100	550	2,500
al Hudaydah	575	580	150	100	171	130	500	2,000
al Jawf	500	530	150	300	160	100	550	1,500
Amanat al Asimah	500	530	143	120	91	130	600	1,333
Amran	500	530	130	300	137	109	650	1,800
Dhmar	556	572	123	465	158	128	653	1,538
Hajjah	575	570	150	100	171	130	550	1,500
Ibb	538	555	150	200	160	120	450	2,400
Lahj	445	415	150	50	171	91	450	1,750
Raymah	595	565	150	150	116	107	500	3,000
Sa'ada	578	590	150	150	141	130	625	750
Sana'a	575	580	130	100	160	125	600	1,375
Socotra	300	440	140	NA	120	140	700	1,200
Taizz	425	425	140	118	120	105	600	2,000

DISTRIBUTION OF PRICES ACROSS YEMEN

How to read a box plot

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Petrol Prices

Median price of petrol per district per liter (in YER)

780	301 - 450
551 - 650	300
451 - 550	Not assessed

Sa'ada

Al Jawf

Amran

Hajjah

Al Mahwit

Amanat Al Asimah

Marib

Sana'a

Shabwah

Al 'Hudaydah

Raymah

Dhamar

Al Bayda

Ibb

Al Dhale'e

Abyan

Taizz

Lahj

Aden

Socotra
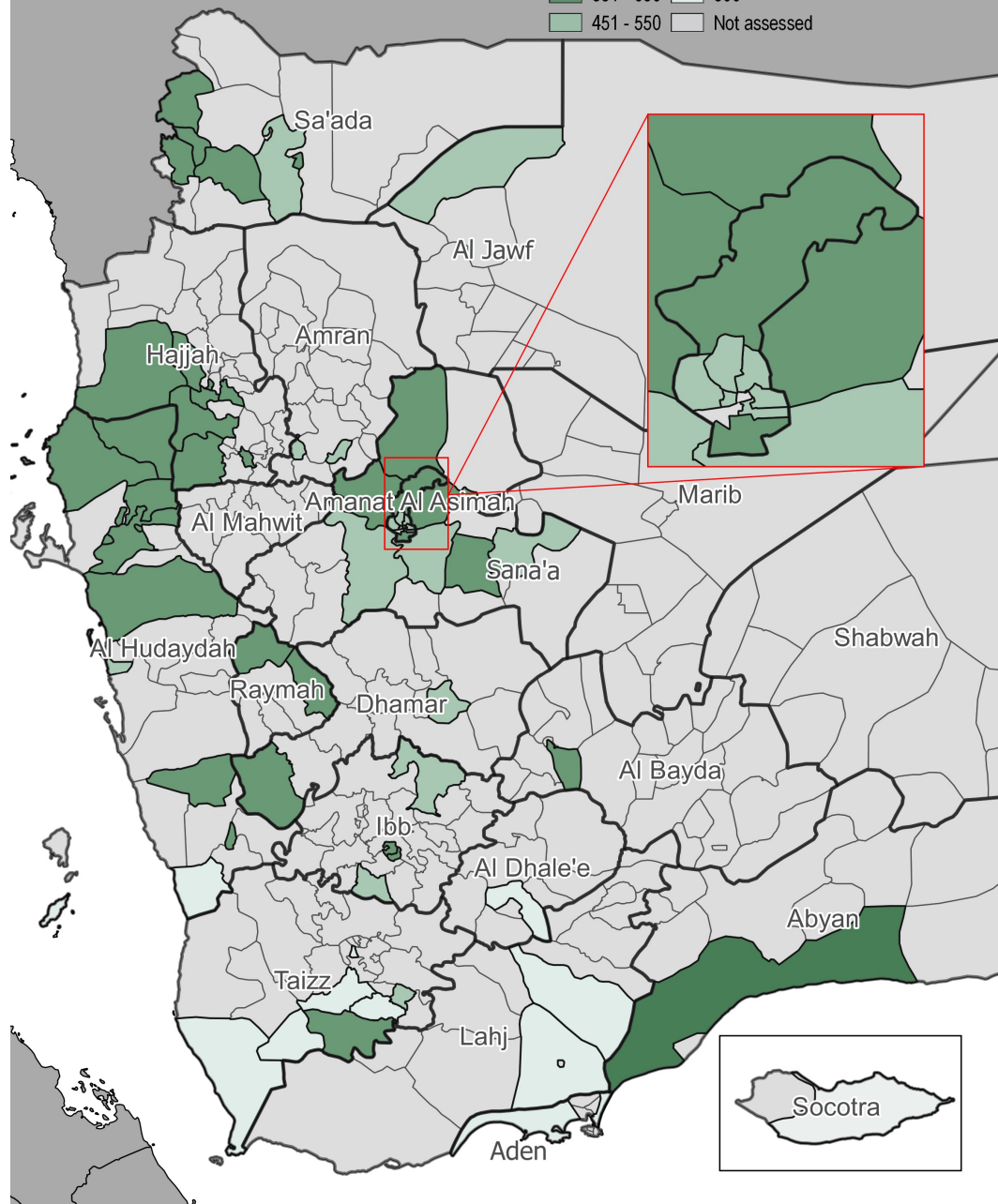
Water Trucking Prices

Water Trucking prices per district per cubic meter (YER)

8,000	1,001 - 2,000
4,001 - 6,000	500 - 1,000
2,001 - 4,000	Not assessed

Sa'ada

Al Jawf

Amran

Hajjah

Al Mahwit

Amanat Al Asimah

Marib

Sana'a

Shabwah

Al 'Hudaydah

Raymah

Dhamar

Al Bayda

Ibb

Al Dhale'e

Abyan

Taizz

Lahj

Aden

Socotra
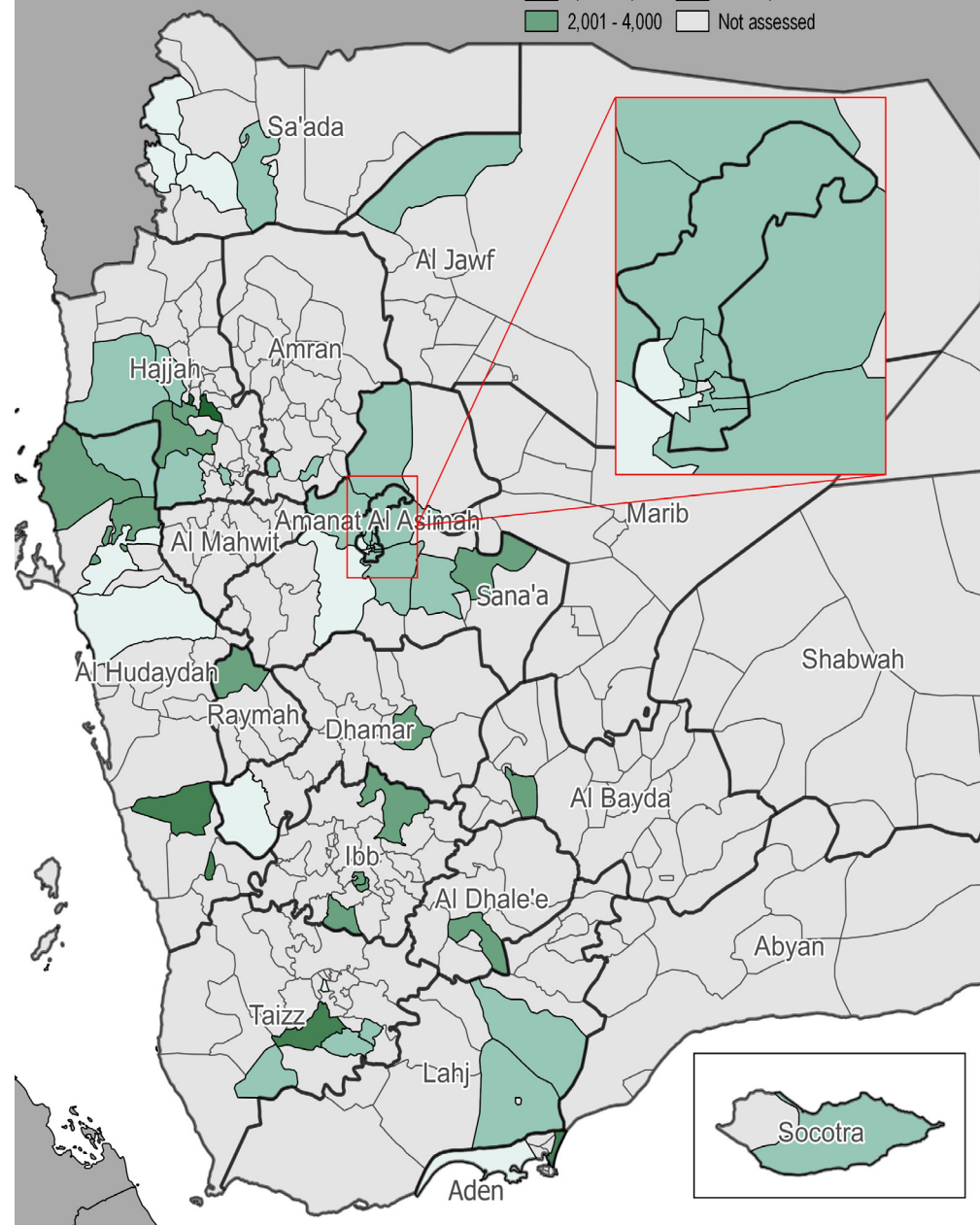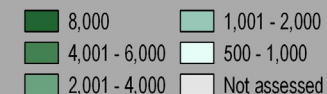
Note: the differences in the number of districts shown between the two maps for fuel and water prices is because the methodology-stipulated requirement for a minimum of three price quotations per market per district was not met.

SUPPLY CHAIN OVERVIEW FOR YEMEN

AVERAGE RESTOCKING TIME (DAYS)

Governorate	Fuel Items	WASH Items
Abyan	7	13
Aden	8	1
al Bayda	8	3
al Dhale'e	9	6
al Hudaydah	8	6
al Jawf	3	3
Amanat al Asimah	4	2
Amran	5	2
Dhamar	3	2
Hajjah	6	4
Ibb	4	9
Lahj	5	2
Raymah	1	2
Sa'ada	10	11
Sana'a	5	2
Socotra	4	2
Taizz	4	4

MOST REPORTED CONSTRAINTS*

Price inflation	92%
Transportation	37%
Liquidity shortage	34%
Insecurity	32%
Shortage of demand	30%
Supply shortage	24%
Government regulations	10%
Other	5%

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

OVERVIEW FOR WATER TRUCKING

75% of water trucking vendor KIs stated that they charged delivery costs based upon the distance between the water source and delivery point. The additional price for 5km is 7,500 YER, for 10 km 8,500 YER.

63% of water trucking vendor KIs stated that they sell non-chlorinated water.

26% of water trucking vendor KIs stated that they sell chlorinated water. An additional **11% reported being unaware if the water they sold was chlorinated.**

89% of water vendor KIs reported sourcing water from a pumping station or a borehole.

3% of water vendor KIs reported sourcing water from treatment station.
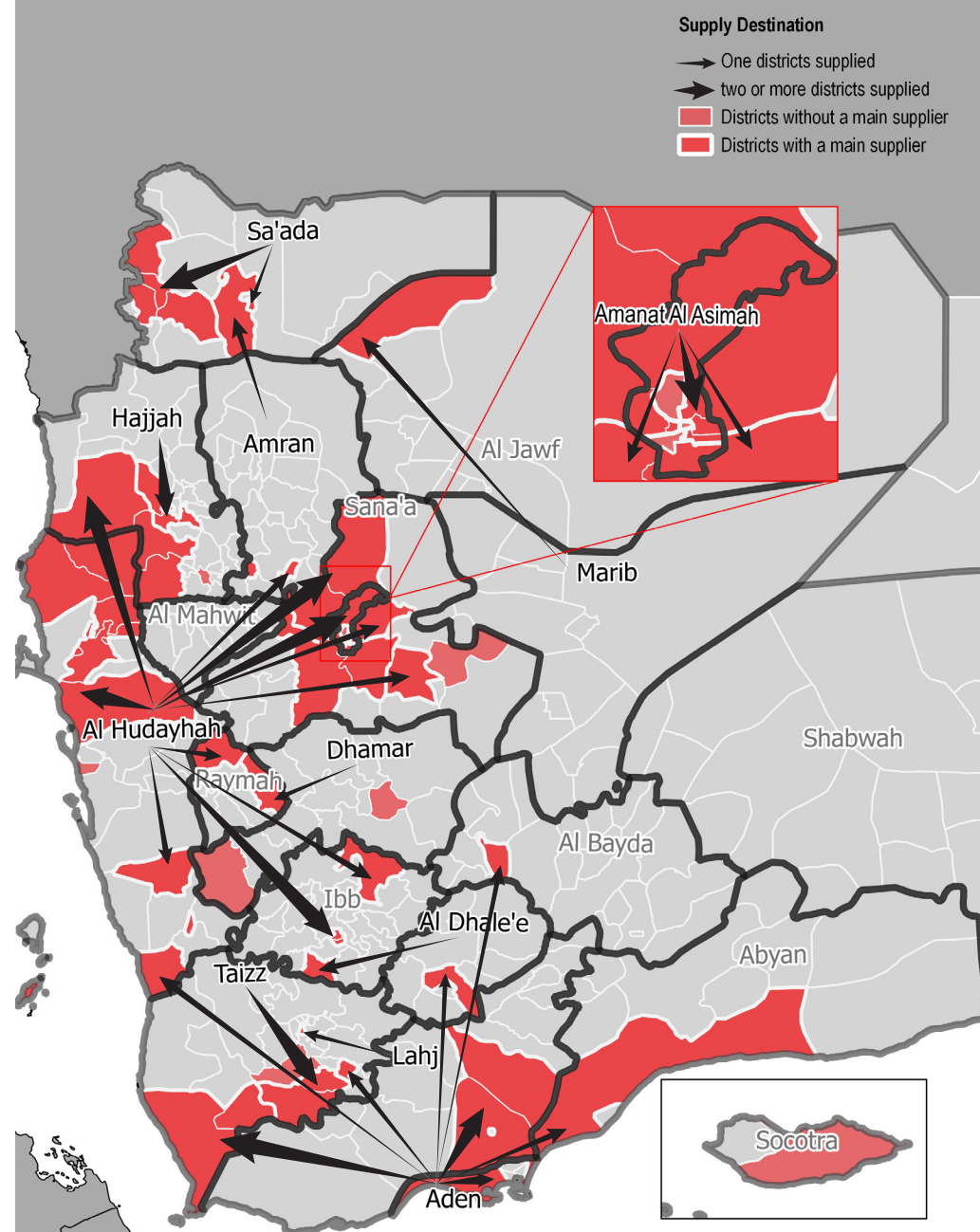
6% of water vendor KIs reported sourcing water from a spring.

CONSTRAINTS AND CHALLENGES

When asked about the top constraints vendors faced in conducting their business, KIs reported price inflation, liquidity shortage, and transportation issues as their three main constraints.

Moreover, vendor Kis reported insecurity and instability, and shortages in demand (with a reduction in customers able to pay) as barriers. The 5% of vendor KIs who selected "others", mentioned fuel availability and fuel cost as their main challenges.

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Petrol and Diesel main supply chain overview*

Supply Destination
→ One districts supplied
➤ two or more districts supplied
Districts without a main supplier
Districts with a main supplier

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

APPENDIX

WHAT IS THE INTERSECTOR 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.
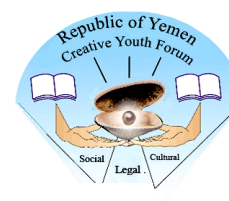
CALCULATION OF DISTRICT AND GOVERNORATE MEDIAN PRICE

The calculation of the aggregated median price for districts and governorates is done following a stepped approach. Firstly, the median of all the price quotation 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.

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.

PARTICIPATING PARTNERS INCLUDE