

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 **21-28 February 2019**

- 15 Participating partners
- 63 Districts assessed
- 350 Vendor KIs surveyed

KEY FINDINGS

In February 2019, the trend of depreciation of the Yemeni Riyal (YER) against the US Dollar (USD) continued, with the USD gaining 6.4% on the parallel market.

250 USD/YER Official ▶ 0.0%	580 USD/YER Parallel market ▲ 6.4%	545 USD/YER Parallel market January 2019
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KEY PRICE FIGURES

The depreciation was not accompanied by an increase in the median price of the assessed items. Instead, following the trend registered in January, the price of the assessed items kept decreasing.

Petrol Price	325 YER	▼ 20.7%
Diesel Price	375 YER	▼ 8.5%
Bottled Water Price	100 YER	▼ 16.7%
Treated Water Price	110 YER	▼ 8.3%

WASH SMEB FIGURES

The median cost for the WASH SMEB was 9,090 YER, marking a decrease of 4.4% from the cost observed in January 2019.

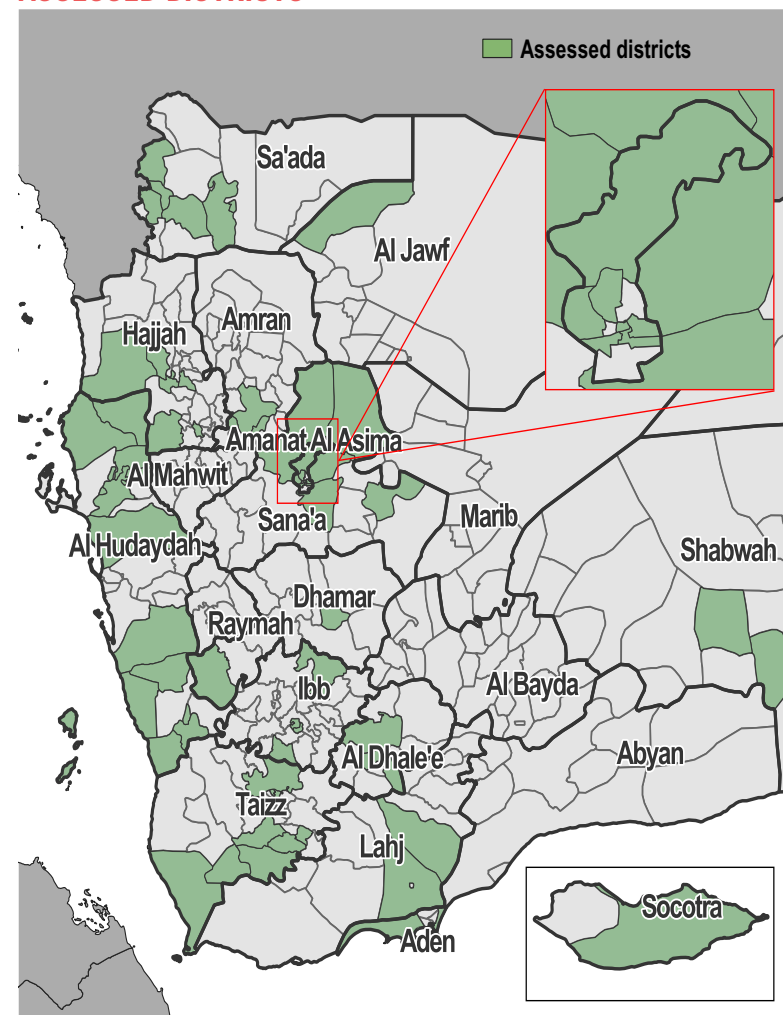
February	9,090 YER	▼ 420 YER	-4.4%
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SUPPLY OVERVIEW

Despite the overall reduction in prices, the assessed 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 4 days compared to 5 days reported in January 2019, and WASH items median restocking time was 4 days compared to 3 days as reported in January 2019.

ASSESSED DISTRICTS



WASH SMEB

Soap
Laundry powder
Sanitary napkins
Water trucking

1.05 kg
2 kg
20 units
3.15 m³

OTHER ASSESSED ITEMS

Petrol
Diesel
Treated water
Bottled water

1 liter
1 liter
10 liter
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.

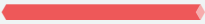

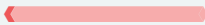
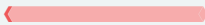
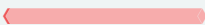
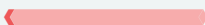
MEDIAN COST OF WASH SMEB

9,090 YER

Change since January 2019 **Change since September 2017**

▼ **420 YER** ▲ **4,067 YER**
-4.4% +81.0%

PAYMENT MODALITIES ACCEPTED*

Cash	100%	
Credit	9.7%	
Mobile money	3.3%	
Prepaid cards	0.2%	
Credit/Debit cards	1.4%	
Vouchers	0.3%	

* Payment modalities can add up to more than 100%

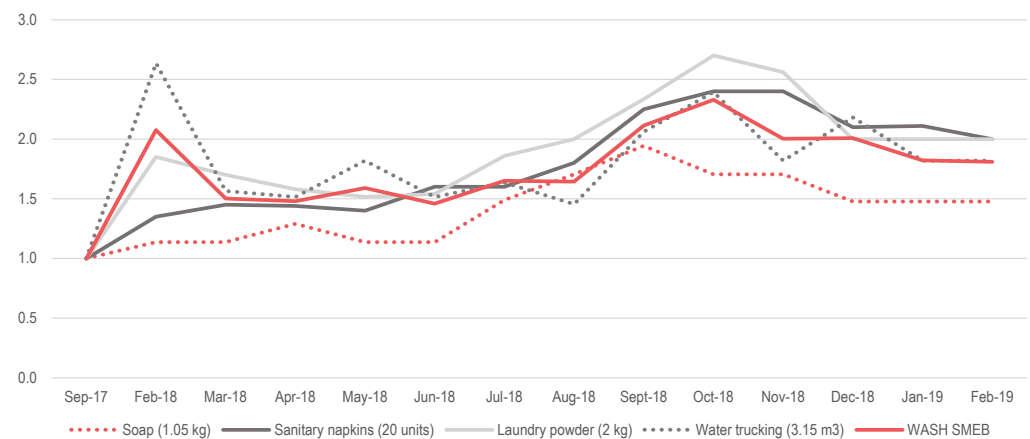
MEDIAN WASH SMEB PRICES, BY GOVERNORATE (IN YER)

Governorate	Soap (10.5 kg)	Laundry powder (2 kg)	Sanitary napkins (20 units)	Water trucking (3.15 m³)	WASH SMEB Feb-19	Change since Jan-19
Aden	1,680	2,272	1,075	7,875	12,903	-21%
al Dhale'e	1,827	1,600	1,050	6,694	11,171	-11%
al Hodaydah	1,410	2,300	820	4,725	9,255	-1%
al Jawf	1,050	2,400	NA*	2,756	NA	NA
Amanat al Asimah	1,260	2,000	1,000	4,725	8,985	15%
Amran	1,339	1,909	1,050	2,835	7,133	-3%
Dhamar	1,234	2,000	1,000	7,403	11,636	0%
Hajjah	1,260	2,000	1,000	3,938	8,198	-22%
Ibb	1,418	2,400	1,100	9,450	14,368	22%
Lahj	1,575	1,545	1,200	2,756	7,077	42%
Sa'ada	1,575	2,600	1,450	2,678	17,438	3%
Sana'a	1,549	2,000	1,000	4,725	9,274	2%
Shabwah	1,470	2,382	1,000	7,064	11,916	1%
Socotra	1,008	1,600	1,200	3,150	6,958	-15%
Taizz	1,351	1,873	1,042	8,978	13,244	-4%

* Enumerators were not able to collect sanitary napkins in al Jawf.

WASH SMEB PRICE INDEX

Since September 2017 (normalized, September 2017 = 1.00)



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

Aden

January 2019: **16,321 YER** February 2019: **12,903 YER**
▼ 21%

al Hodaydah

January 2019: **9,363 YER** February 2019: **9,255 YER**
▼ 1%

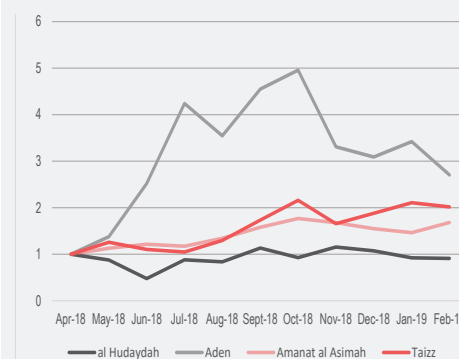
Taizz

January 2019: **13,816 YER** February 2019: **13,244 YER**
▼ 4%

Amanat al Asimah

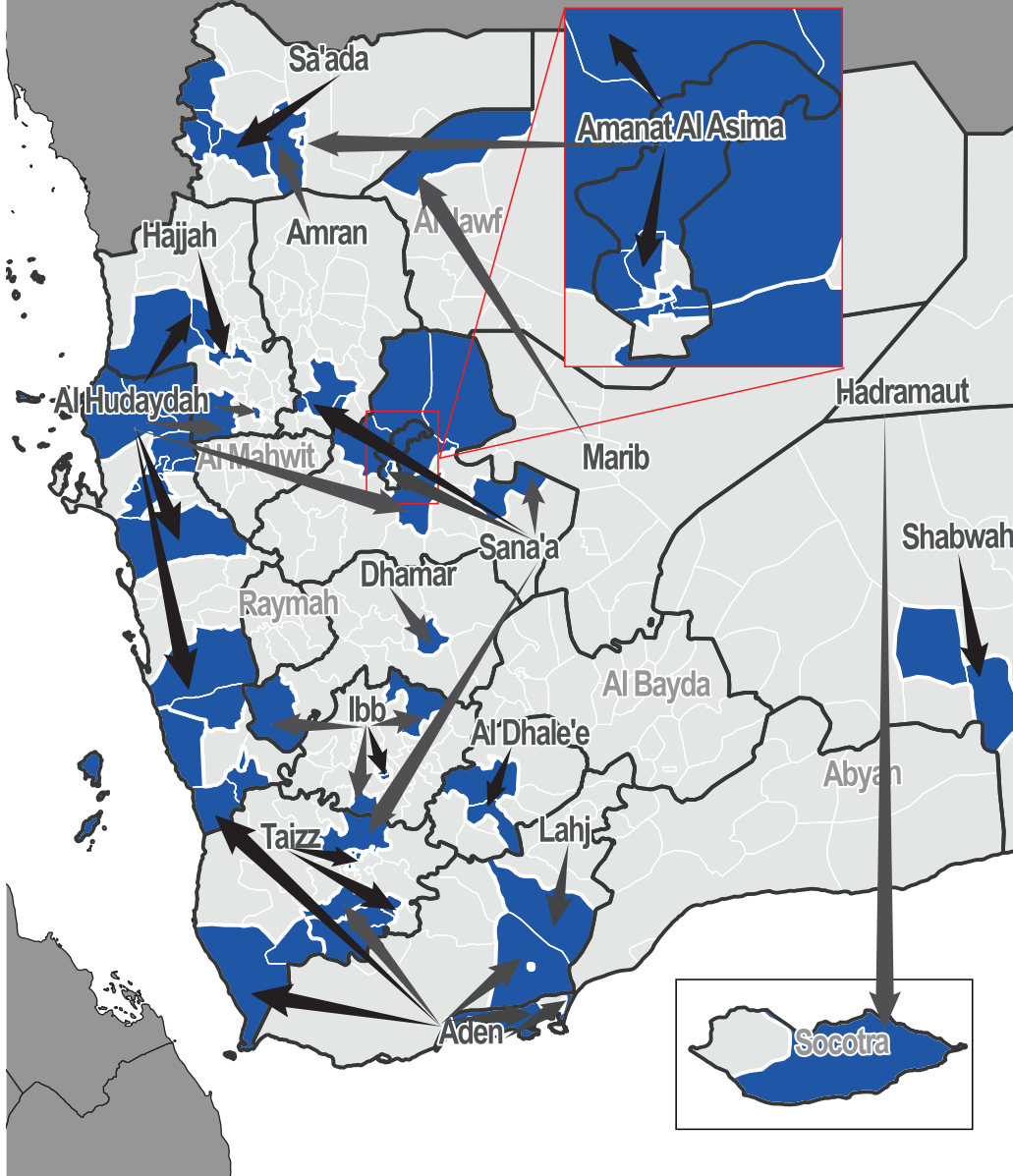
January 2019: **7,828 YER** February 2019: **8,985 YER**
▲ 15%

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



WASH SMEB Supply Chain Overview

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

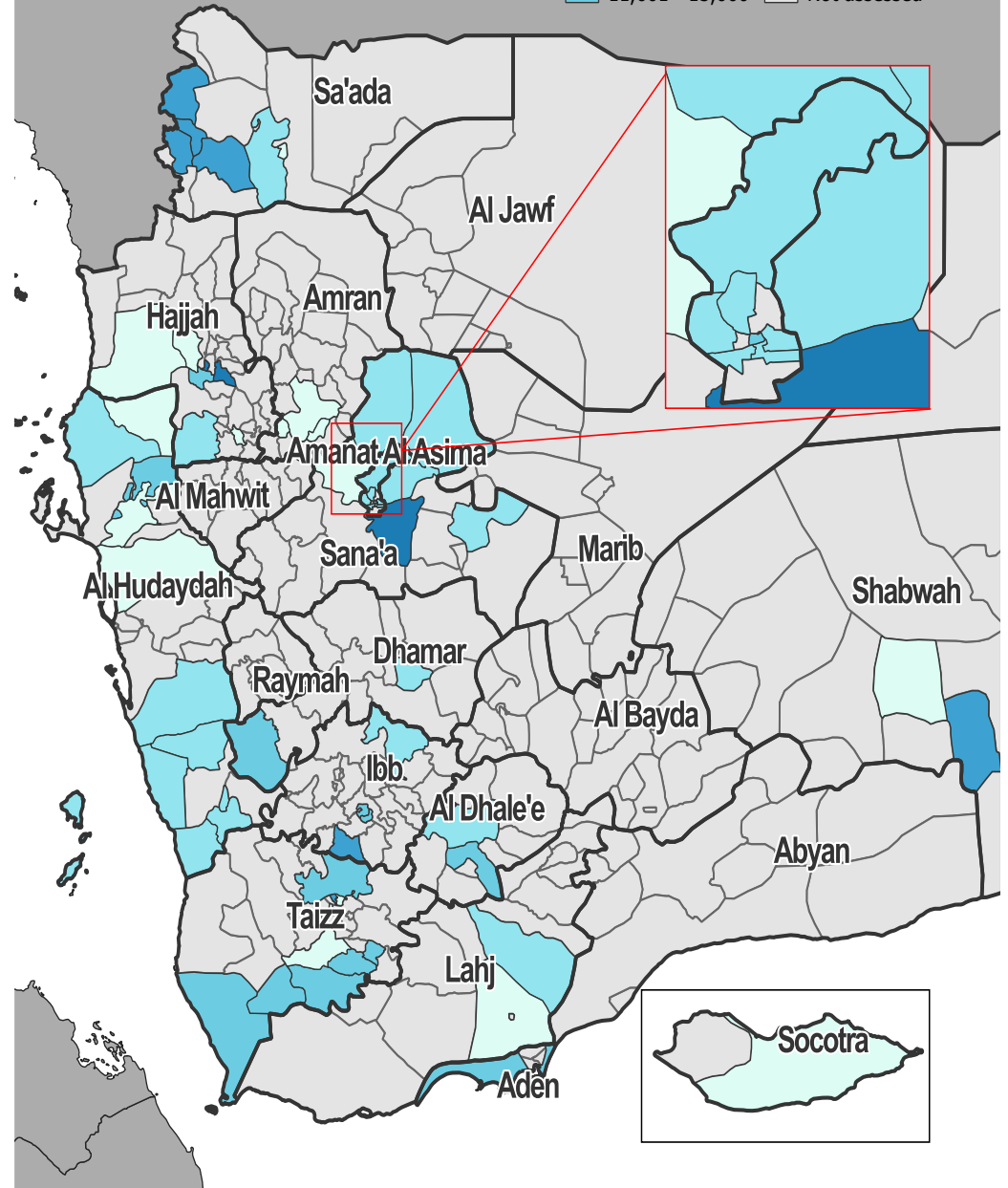


*The map shows fuel supply chain inside the same governorate and towards other governorates. District without a main supplier are those district where vendor KIs could not identify the origin of the fuel they sold.

Median cost of WASH SMEB

Median WASH SMEB Cost (YER)

- 20,001 - 23,675
- 15,001 - 20,000
- 11,001 - 15,000
- 8,001 - 11,000
- 5,381 - 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 (IN YER)*

Item	September 2017 (baseline) [^]	November 2017 [^]	November 2018	December 2018	January 2019	February 2019	% Change (Jan-Feb)
Diesel	235	394	550	448	410	375	-8.5%
Petrol	275	349	550	418	410	325	-20.7%
Treated water	NA	175 ↯	120	100	120	110	-8.3%
Bottled water	70	100	150	120	120	100	-16.7%
Soap	88	NA	150	130	130	130	0.0%
Sanitary napkins	250	NA	600	518	528	500	-5.2%
Laundry powder	50	NA	128	100	100	100	0.0%
Water trucking	825	1,700	1,500	1,800	1,650	1,500	-9.1%

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

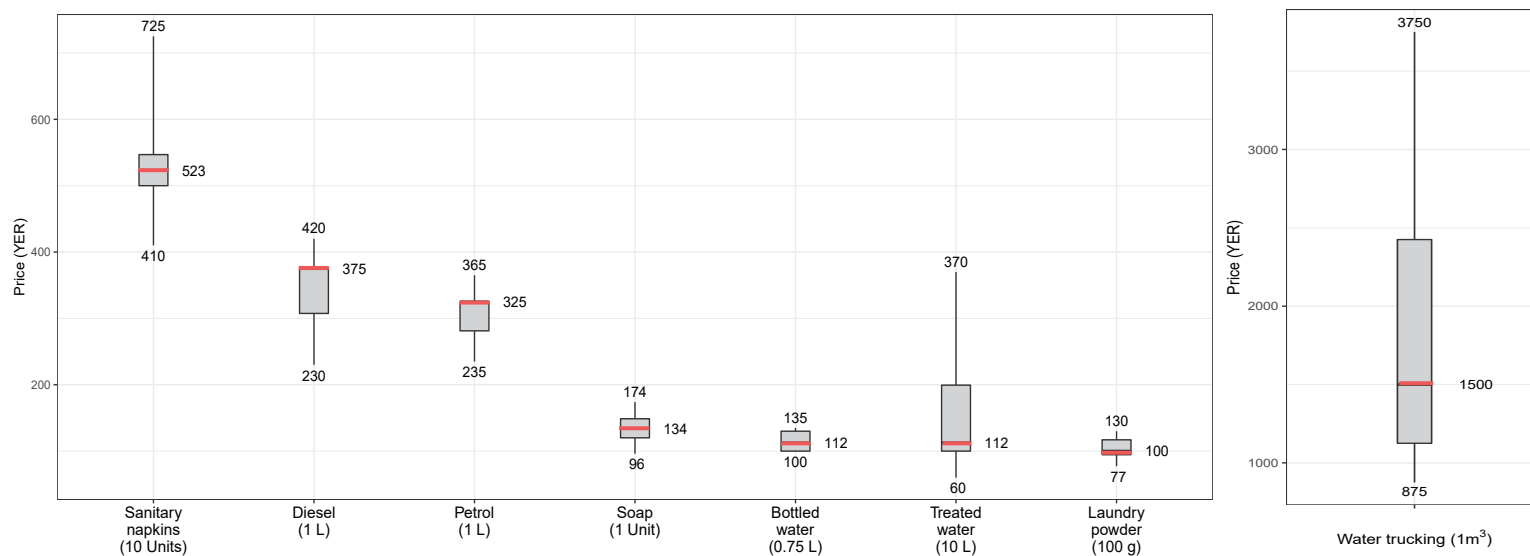
[^] Price levels for September 2017 are the price quotations recorded during the Multi-Agency Joint Cash Study, while prices for November 2017 were recorded during the Weekly Price Monitoring Initiative conducted by the WASH Cluster.

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

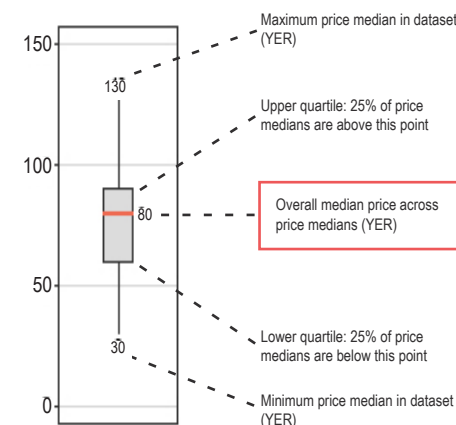
MEDIAN PRICE PER GOVERNORATE (IN YER)

Governorate	Petrol (1L)	Diesel (1L)	Bottled water (0.75L)	Treated water (10L)	Soap (1 Unit)	Laundry powder (100g)	Sanitary napkins (10)	Water trucking (1m ³)
Aden	275	310	130	113	160	114	538	2,500
al Dhale'e	288	305	115	100	174	80	525	2,150
al Hudaydah	325	375	135	75	134	115	410	1,500
Amanat al Asimah	325	375	100	115	120	100	500	1,500
Amran	330	384	113	199	128	95	525	900
Dhamar	330	375	105	370	118	100	500	2,350
Hajjah	325	375	110	100	120	100	500	1,250
Ibb	325	375	130	200	135	120	550	3,000
Lahj	275	303	130	150	150	77	600	875
Sa'ada	365	400	135	300	150	130	725	850
Sana'a	325	420	100	60	148	100	500	1,500
Shabwah	240	298	100	80	140	119	500	2,243
Socotra	235	230	100	100	96	80	600	1,000
Taizz	325	333	123	100	129	94	512	2,850

DISTRIBUTION OF PRICES ACROSS YEMEN

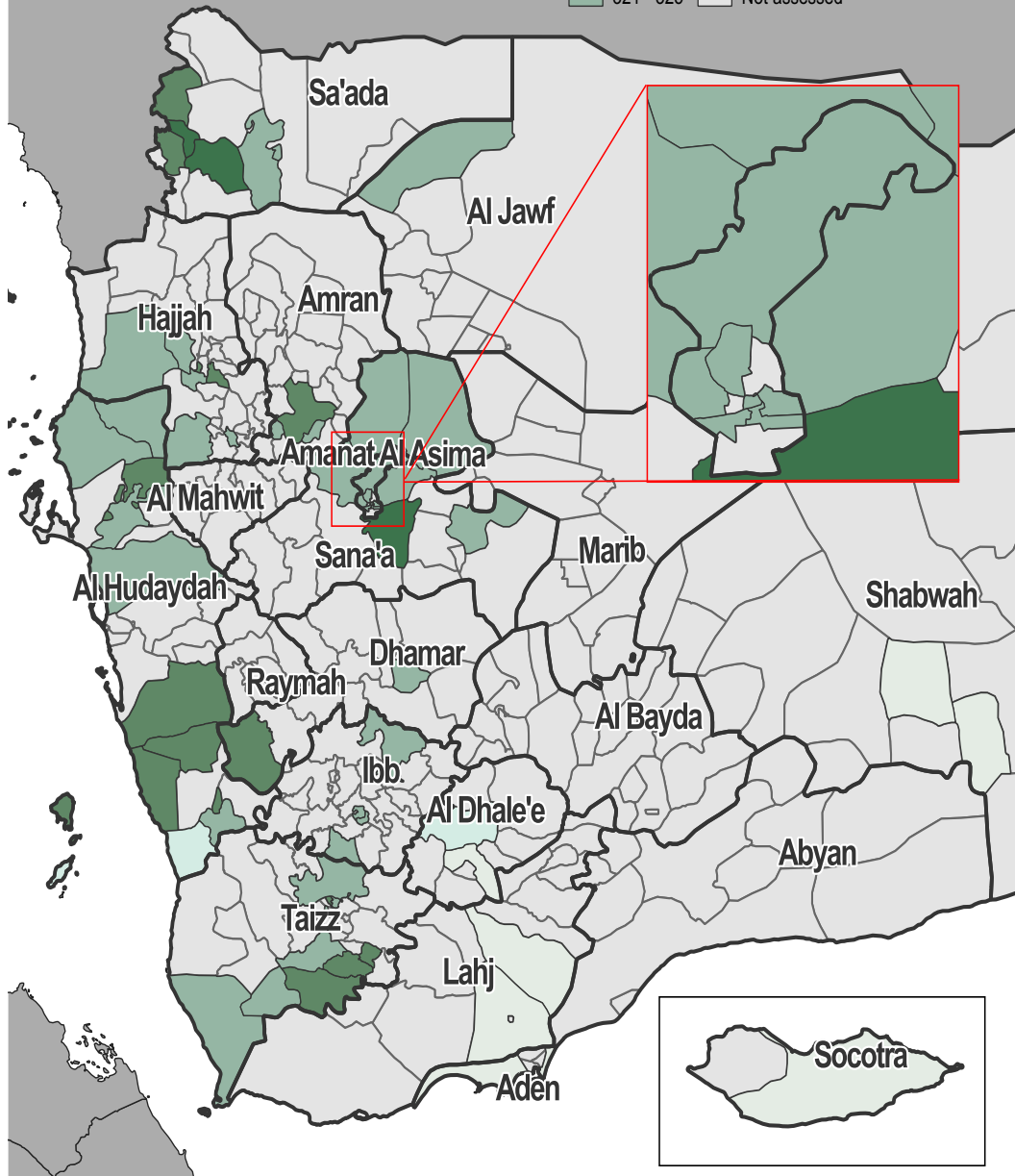


How to read a box plot



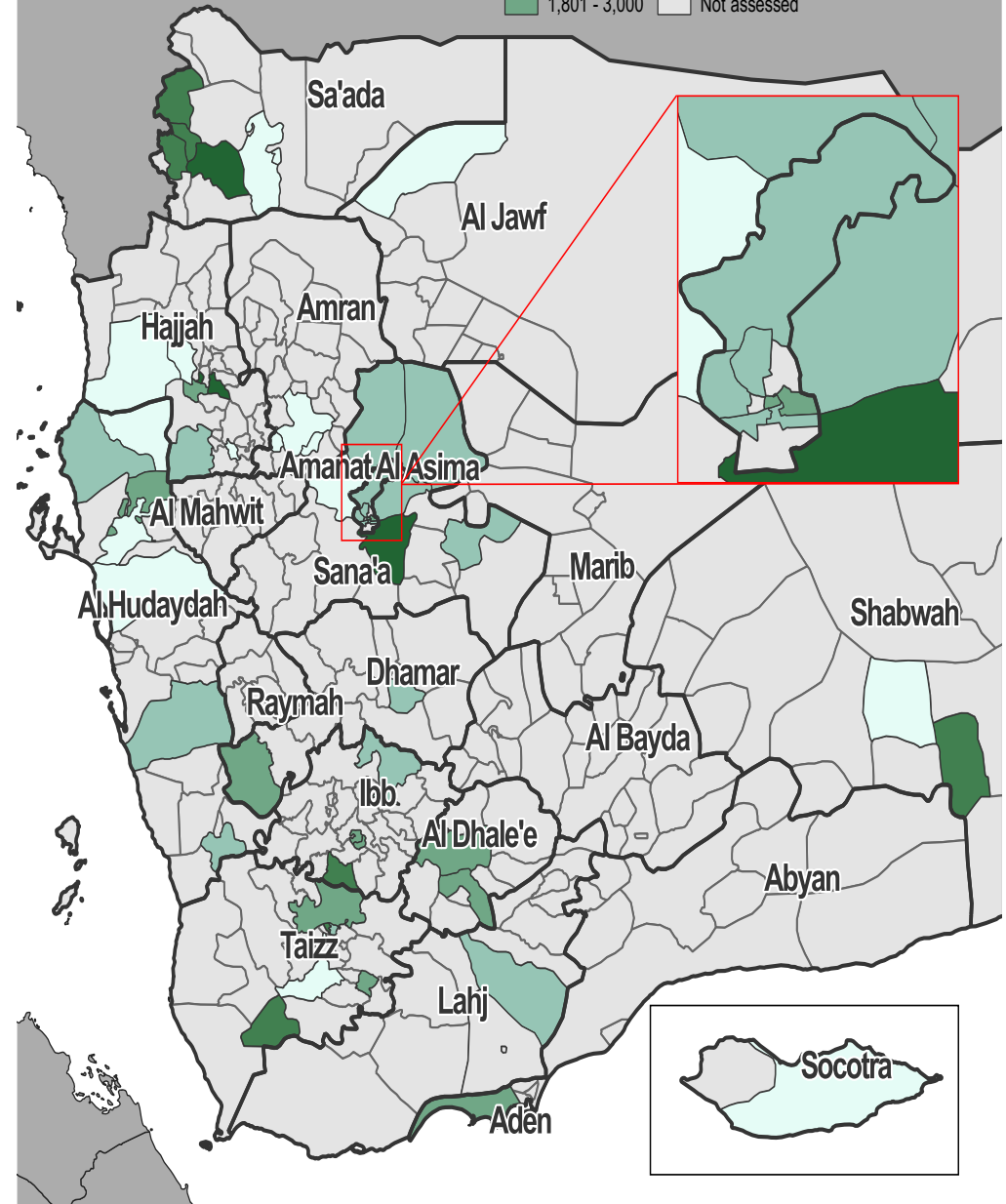
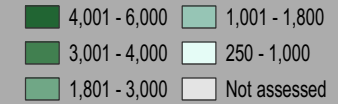
Petrol Prices

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



Water Trucking Prices

Water trucking prices per district per cubic meter (YER)



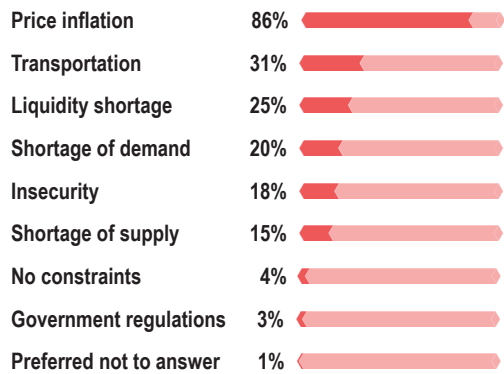
Note: the differences in the number of districts shown between the two maps for fuel and water prices are due to the methodology-stipulated requirement for a minimum of three price quotations per market per district.

SUPPLY CHAIN OVERVIEW FOR YEMEN

AVERAGE RESTOCKING TIME (DAYS)

Governorate	Fuel Items	WASH Items
Aden	5	3
al Dhale'e	20	5
al Hudaydah	3	6
al Jawf	2	2
Amanat al Asimah	5	5
Amran	5	2
Dhamar	3	2
Hajjah	4	4
Ibb	4	11
Lahj	7	5
Sa'ada	5	5
Sana'a	5	2
Shabwah	4	1
Socotra	4	3
Taizz	3	3

MOST REPORTED CONSTRAINTS*



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

OVERVIEW FOR WATER TRUCKING

72% of water trucking vendor KIs stated that they charged delivery costs based on the distance between the water source and the delivery point. The additional price for 5km is **7,000 YER** and **9,000 YER** for 10 km.

76% of water trucking vendor KIs stated that they sell non-chlorinated water.

12% of water trucking vendor KIs stated that they sell chlorinated water. An additional **11%** reported being unaware if the water they sold was chlorinated.

94% of water vendor KIs reported sourcing water from a pumping station or a borehole.

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

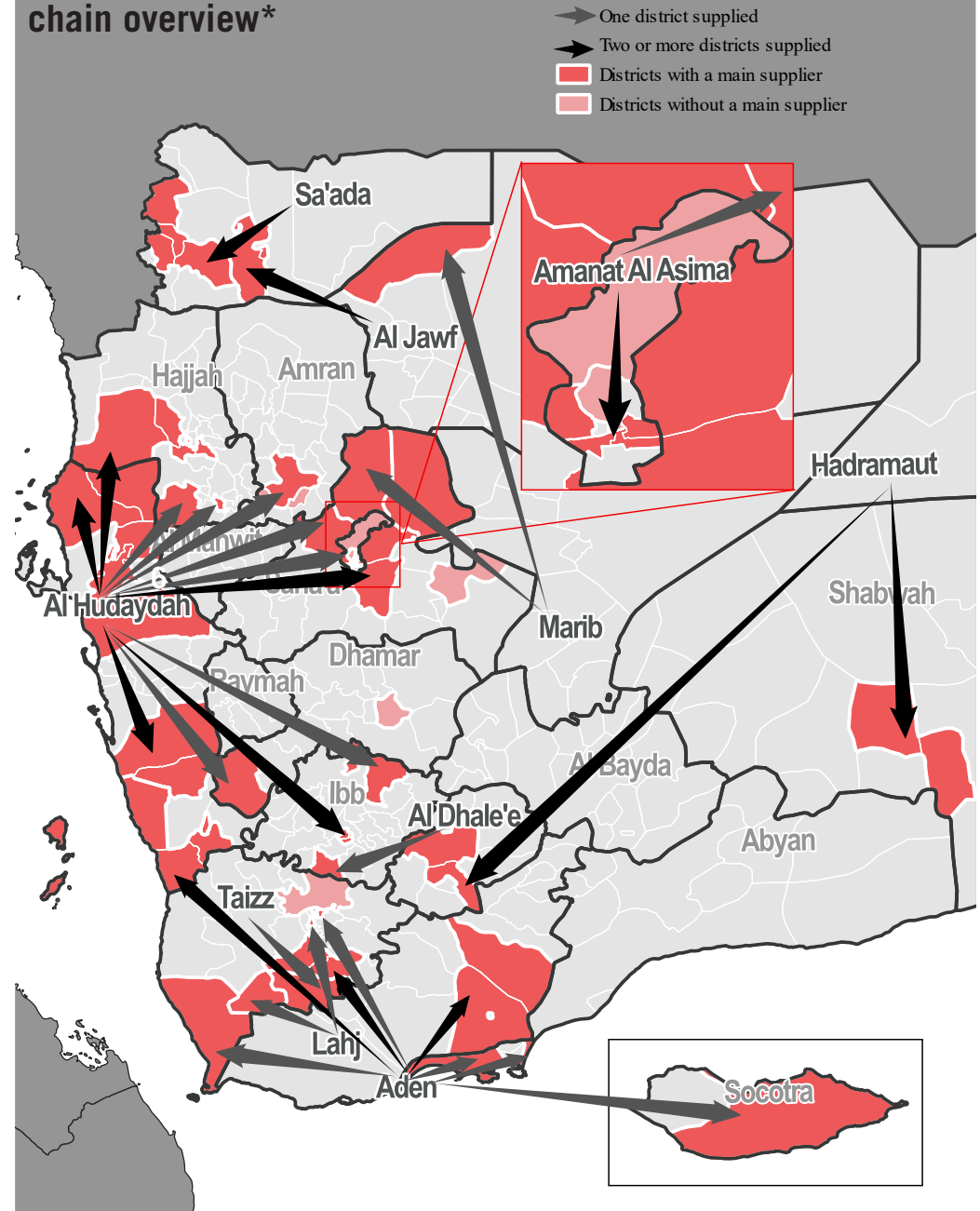
2% of water vendor KIs reported sourcing water from a spring.

CONSTRAINTS AND CHALLENGES

When asked about the top constraints vendors faced in conducting their business, KIs reported price inflation, transportation, liquidity and shortage of demand as their top four issues. Water truck owners reported long queues at the pumping station due to wells drying out, increasing the overall cost of water trucking.

Multiple shop owners reported having issues sourcing diesel from fuel stations, having to resort to purchasing it from the black market.

Petrol and Diesel main supply chain overview*



*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 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.

PARTICIPATING PARTNERS INCLUDE



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).