

## Effects of the fuel embargo at Al Hodeidah port on fuel supply dynamics and fuel prices

### OVERVIEW

The Internationally Recognized Government of Yemen (IRG) suspended fuel imports through Al Hodeidah port in June 2020 and has since permitted only limited and occasional imports via this route.

The suspension has not led to a shortage in fuel supply to areas under the control of the de-facto authority (DFA) in the north of Yemen (also known as the Houthis) even though the port provided almost half of the monthly fuel import volumes to the country. In-country supply chains quickly adjusted, enabling overland transport of fuel to the more lucrative market in DFA-controlled areas from ports in IRG areas to offset the reduction in supply through Al Hodeidah. This has resulted in some shortages in IRG-controlled areas.

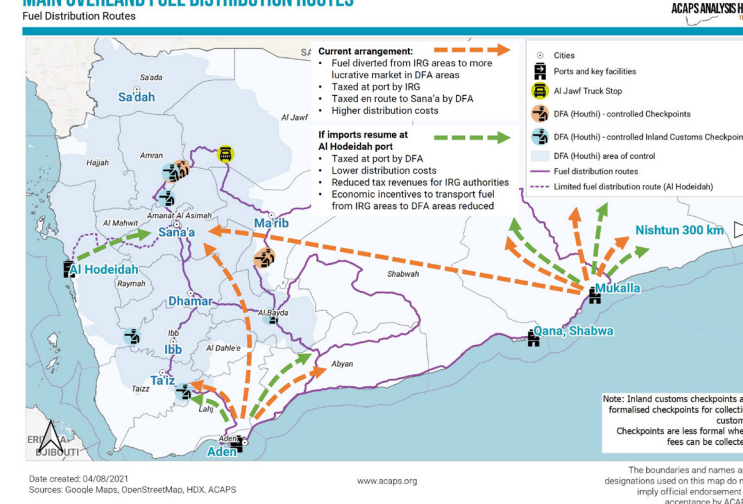
The IRG has benefitted financially from additional customs and duty revenue on fuel imported via the south, while the DFA has mitigated the lost fuel import revenue at Al Hodeidah port by collecting the duty at inland customs checkpoints.

Overall, the Al Hodeidah suspension has increased already high fuel prices for consumers and aggravated shortages that affect the Yemeni people and their livelihoods.

#### In DFA-controlled areas:

- Despite adequate fuel supply, the authorities have rationed fuel for the end consumer on the official market. Fuel is not being rationed on the parallel market, which receives most of the supply. Fuel is sold at an inflated price on the parallel market.
- The DFA has continued to generate revenues from the fuel imports trucked overland. These revenues are meant to pay outstanding public sector employee salaries but are unlikely to be used for that purpose.
- Fuel rationing and increased prices are negatively affecting the budgets of households, humanitarian organisations, and the private sector. This leads to further pressure on households, especially those with already limited purchasing power; potentially reduces the resources and capacity of humanitarian organisations to implement their programmes; and disrupts the production capacity of businesses and market supply.
- Higher fuel prices and transportation costs limit people's mobility and diminish the provision of services at affordable prices.
- Fuel rationing and increased fuel prices are likely to reduce the delivery of food, goods, medicine, and trucked water, leading to shortages of goods, reduced access to affordable clean drinking water, and interruptions in supply chains.
- High fuel prices will increase the cost of irrigating land, in seasons when needed, possibly leading to a significant reduction in local agricultural production. Fuel price increases have affected the production of food transported between governorates, raising fruit and vegetable prices.

### MAIN OVERLAND FUEL DISTRIBUTION ROUTES



See full map on page 8.

#### In IRG-controlled areas:

- Fuel prices have been rising with the further depreciation of the Yemeni rial (YER) against the US dollar (USD). The lucrative business of supplying fuel to DFA-controlled areas has resulted in a greater proportion of fuel going to DFA areas instead of to IRG areas, and market disruptions were observed.
- Reduced mobility and service delivery and limited access caused by high fuel prices could further affect people and their livelihoods, including local food production, fisheries, and humanitarian operations (as observed in DFA areas).

#### All of Yemen:

- Significant fuel price rises over the past few years have had a negative impact on consumers in both DFA and IRG areas. Fuel will potentially become increasingly unaffordable for households, businesses, and humanitarian organisations.

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**Map 1 details the main overland distribution routes in Yemen (see page 8). If imports resumed at Al Hodeidah port rather than transporting fuel overland from IRG to DFA areas:**

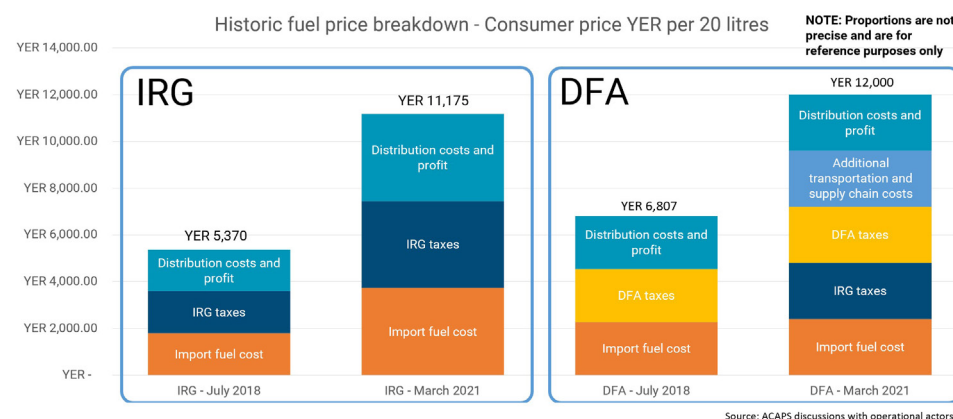
1. Taxes would be levied only by the DFA.
2. Tax revenues would be reduced for IRG authorities.
3. Fuel distribution costs would be reduced.
4. Fewer checkpoints would be passed.
5. Economic incentives to transport fuel received in the southern ports to DFA-controlled areas would be reduced.

## 1. FUEL PRICE STRUCTURES IN IRG AND DFA AREAS

The embargo at Al Hodeidah port and the subsequent transportation of fuel overland have affected the fuel price structure in Yemen. Graph 1 breaks down fuel prices in IRG and DFA areas before and after the implementation of the fuel embargo at Al Hodeidah. It also highlights the overall rise in the price of fuel between July 2018 and March 2021.

While the price structure in IRG areas remained the same, in DFA areas, the price of fuel transported now includes IRG taxes and additional transportation and supply chain costs caused by the embargo and overland transport of fuel from ports in IRG areas into DFA areas.

Graph 1: Fuel price breakdown in IRG and DFA areas between July 2018 and March 2021.



Source: ACAPS' discussions with operational actors.

Fuel prices at Yemen Petroleum Company (YPC) stations in DFA-controlled areas increased by 76% between July 2018 and April 2021, from YER 6,807 to YER 12,000 per 20 litres. When converting these prices to USD and adjusting to the local exchange rate, consumers in DFA areas saw a 32% increase in the price of fuel, from USD 15.17 to USD 20.03 per 20 litres. In IRG-controlled areas, prices rose by 108% between July 2018 and April 2021, from YER 5,372 to YER 11,175 per 20 litres. When converting these prices to USD and adjusting to the local exchange rate, which is different from the one in DFA areas, consumers saw a 1% increase in price, from USD 11.86 to USD 11.98 per 20 litres, because of alignment with currency depreciation.

## 2. THE FUEL STANDOFF BETWEEN IRG AND DFA – BACKGROUND

### 2.1 Fuel imports into Yemen – import mechanism and actors in the supply chain

Before the embargo, fuel imports in Yemen came mainly through the Red Sea port of Al Hodeidah, which is under DFA control, and the southern ports of Aden and Mukalla, with small percentages passing through Nishtun, in the Gulf of Aden in IRG-controlled areas.

Table 1: Import volumes in the year preceding the start of the fuel embargo (June 2019 to May 2020)

PORT	TOTAL FUEL VOLUMES IN METRIC TONS (MT)	% OF TOTAL	LOCATION IN AREA OF CONTROL	CLEARANCE AUTHORITY
Al Hodeidah	2.3 million	48%	DFA	IRG (after verification from UNVIM)
Aden	1.6 million	33%	IRG	IRG Ministry of Transport
Mukalla	779,000	16%	IRG	IRG Ministry of Transport
Nishtun	141,000	3%	IRG	IRG Ministry of Transport

Source: ACAPS' discussions with operational actors; UNVIM, accessed 10/08/2021.

Commercial fuel imports through ports under DFA control, including Al Hodeidah, undergo the United Nations Verification and Inspection Mechanism for Yemen (UNVIM). This mechanism is managed and operated by UNOPS at the request of the IRG to ensure compliance with Security Council Resolution 2216 (2015) (UN SC 14/04/2015) for vessels sailing to ports of Yemen not under its control. After vessels are cleared by UNVIM, they are held in a demarcated Coalition Holding Area (CHA) in the Red Sea off Al Hodeidah port. Vessels stay in the CHA until the IRG authorities and Saudi-led coalition permit them to come to port and unload.

Clearance requests for all other Yemeni ports are under the control of the IRG and managed directly by the Government's Ministry of Transport (UNVIM accessed 10/08/2021).

Private sector importers bring in the fuel via Al Hodeidah. Once the fuel is cleared by UNVIM and unloaded, it is divided up according to local market needs, with a percentage being loaded into YPC storage facilities in DFA areas and a percentage sold on the local market. The YPC is run by DFA authorities within their areas and is the sole authorised distributor there. It is also responsible for coordinating the sale of fuel on the domestic fuel market in DFA areas (at both YPC-run and privately owned fuel stations) and the provision of fuel to local traders that require larger amounts to cover their operational needs.

At Aden and Mukalla, private sector importers bring the fuel into the country. A percentage of the imported fuel goes to local YPC branches, which sell it on the local market. Surplus fuel is sold outside of Aden city and Mukalla (including in DFA-controlled territories) by private sector distributors contracted by importers to truck the fuel overland. Some importers that previously imported via Al Hodeidah were authorised to import via either Aden or Mukalla when the embargo was implemented (key informant interviews [KIIs] 10/2020–01/2021).

### 2.2 Timeline of events of the fuel embargo

The IRG's initiation of the fuel import suspension in June 2020 is generally thought to have been triggered by a suspected DFA withdrawal of up to YER 45 billion from an account at the Central Bank of Yemen's Al Hodeidah branch. The account contained months' worth of fuel import taxes and customs fees. According to an agreement that the Office of the Special Envoy of the Secretary-General for Yemen brokered in November 2019 between DFA and IRG, the deposit was earmarked to pay public sector employees in DFA-controlled areas. Instead, it was allegedly channelled to fund DFA war efforts (Sana'a Center 11/07/2020).

From October–December 2020, normal service resumed at Al Hodeidah after the IRG authorised fuel imports on a regular basis at the port, without restrictions or conditions. The shift in October and the easing of IRG-imposed restrictions was largely thanks to the mediation efforts of the then UN Special Envoy for Yemen, Martin Griffiths, and the efforts of the Office of the Special Envoy of the Secretary-General for Yemen to get both IRG and the DFA to agree to a new Al Hodeidah fuel import mechanism (Sana'a Center 11/07/2020).

Early in 2021, the negotiations were likely influenced by the IRG's unwillingness to come to an agreement in light of the temporary DFA's designation as a foreign terrorist organisation by the United States in January (which was revoked on 16 February) and the military escalation in Marib since February 2021.

The stalemate of negotiations continues to influence the volumes of fuel imports permitted by the IRG through Al Hodeidah. On an ad hoc basis, fuel vessels from the CHA off Al Hodeidah port have been allowed to unload their cargo since the beginning of 2021, generally in anticipation (or as a result) of international pressure regarding the humanitarian situation in the country (KIIs 04–07/2021). As at August 2021, the issue of a new import mechanism remained unresolved.

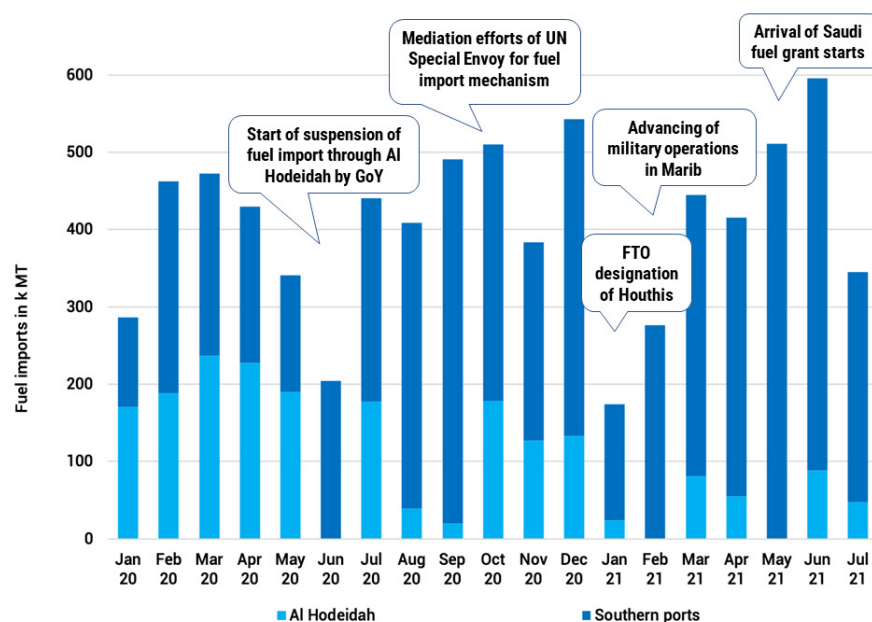
### 3. FUEL IMPORTS INTO YEMEN SINCE 2020

Graph 2 shows fuel imports per month per port in 2020 and 2021, highlighting the notable difference of fuel imports through Al Hodeidah in 2020 and the start of the increase in volumes coming through the southern ports of Aden and Mukalla (especially in August–September 2020). It also shows that from October–December, fuel did come through Al Hodeidah following the UN Special Envoy’s intervention. Since then, fuel imports have predominantly come in via Aden and Mukalla and only sporadically via Al Hodeidah.

The very high volumes through the southern ports in May–June 2021 are bolstered by the arrival of batches of a Saudi fuel grant worth USD 422 million that was announced in March 2021 to alleviate electricity shortages by supplying fuel to power stations in IRG areas (Reuters 31/03/2021; Sana’a Center 07/05/2021).

The lower fuel import volumes in July, following high volumes through Aden and Mukalla in May and especially June, are potentially a sign of lower demand in DFA areas owing to fuel price increases that make fuel less affordable.

Graph 2: Fuel imports from January 2020 to July 2021 in MT.



Source: ACAPS’ discussions with operational actors.

### 4. ALTERNATIVE FUEL SUPPLY ROUTES TO DFA AREAS

Fuel supply routes in Yemen have seen a major change as a consequence of the fuel embargo at Al Hodeidah. Until June 2020, the Al Hodeidah-Sana’a supply route accounted for the largest volume of fuel sent to DFA areas. With the limited imports through Al Hodeidah, an increased use of alternative supply and transportation routes from Aden to Sana’a (and, to a lesser extent, Mukalla) to transport fuel overland from southern ports to DFA areas has been observed (KIIs 06–10/2020). Qana port, opened in January 2021, plays a minor role in terms of fuel import volumes, as does Nishtun port further east (Debrief 26/01/2021; NABD 29/01/2021).

### 5. IMPACT ON AVAILABILITY AND PRICES OF FUEL IN DFA-CONTROLLED AREAS

#### Availability of fuel

In terms of fuel volumes arriving in DFA areas, the overland transport has likely substituted the fuel imports coming to Al Hodeidah port – also helped by supply from local production in Marib – and no actual shortages that could be attributed to a decreased fuel supply have been experienced. Despite no shortage in supply, the fuel in DFA areas has been artificially rationed at the official DFA-run YPC petrol stations. Most of the fuel now goes to the parallel market instead, to both licensed and unlicensed fuel stations, where fuel has been readily available at much higher prices (KIIs 04–07/2021).

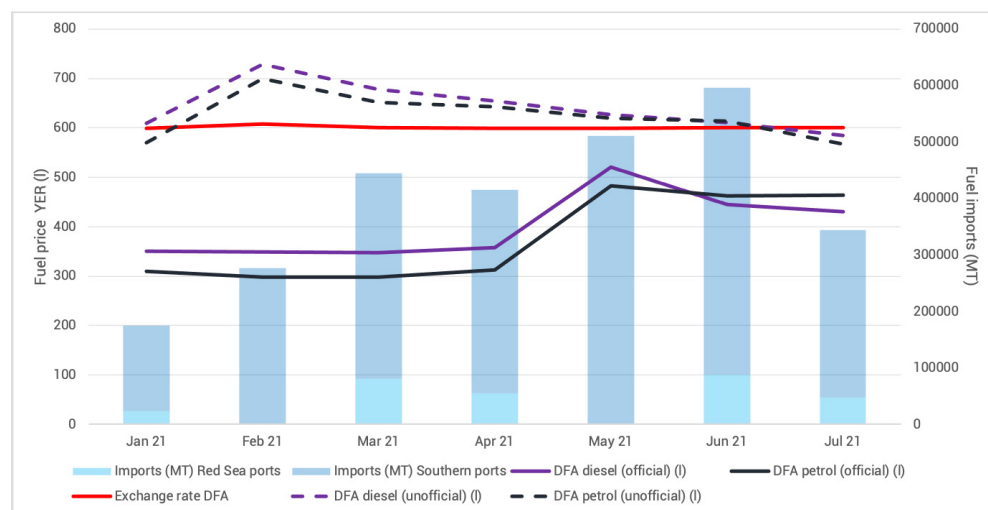
#### Fuel prices

In DFA-controlled areas, the end consumer price for fuel imported via Al Hodeidah is determined by the following factors: global fuel prices (i.e. the price that the importer paid), fuel import taxes (when the fuel enters the port) and customs, port fees, respective profit margins for both the importer and the YPC, and YPC operating costs (including overland transportation and distribution costs) (KIIs 04–07/2021).

Now that most fuel is imported via southern ports, additional costs are incurred to compensate for the loss of revenue that the DFA previously generated at Al Hodeidah. The DFA uses inland customs checkpoints, strategically placed on key overland transportation and trade routes at the point of entry into DFA territory, to impose additional customs fees. This means that customs fees are levied at the southern entry ports and again when fuel enters DFA-controlled areas.

Graph 3 shows the fuel price development vs. total imports and exchange rate in DFA areas in the first six months of 2021.

Graph 3: Fuel imports in MT vs. diesel and petrol prices and YER/USD currency exchange rate in DFA areas in January–July 2021.



Sources: FAO 03/08/2021; Telegram and ACAPS' discussions with operational actors.

The price rise observed in DFA-controlled areas results from increased logistical costs, the double levying of import taxes, and the setting of a higher profit margin. Most of the fuel now goes to the parallel market, where it is sold at an inflated price that sets a disproportional level for the official price. Parallel market prices peaked in February, when there was no fuel import via Al Hodeidah. Prices then dropped slightly in March and April when there were limited fuel volumes coming through Al Hodeidah port and supplies arriving overland. The official market prices peaked in April and May, when limited amounts of fuel became available at official fuel stations.

The official price decreased slightly in June, in line with the price on the parallel market. Lower consumer demand combined with a healthy supply of fuel in DFA areas over the past few months is likely causing the decrease in prices, albeit to a level that is higher than before the embargo.

## 6. IMPACT ON AVAILABILITY AND PRICES OF FUEL IN IRG AREAS

### Availability of fuel

Limited volumes of fuel coming through Al Hodeidah have potentially led to shortages of fuel in IRG areas over the past few months, with traders keen to send fuel to DFA areas, where they stand to make more money. The significant volumes of fuel coming into Yemen mostly through Aden port in May–June 2021 were boosted by the Saudi fuel grant intended to alleviate electricity shortages in IRG areas.

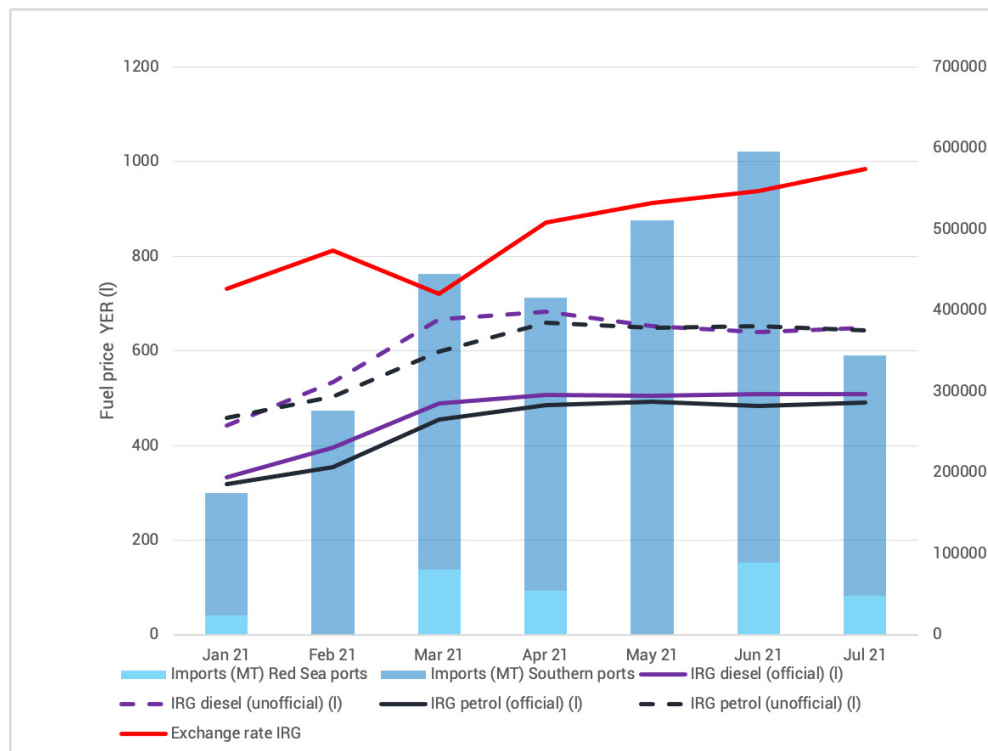
### Fuel prices

As in DFA-controlled territories, several factors determine the cost of fuel in areas outside DFA control, including global fuel prices and the cost of importing the fuel to Yemen, fuel import taxes and customs, port and storage fees, and overland transportation and distribution costs. The price structure and consumer price vary more between governorates in IRG-controlled areas than in DFA areas. Price variations and local price fluctuations are shaped by the local context and the fragmentation of the YPC branches that fall under IRG authority (KIIs 04–07/2021). The main difference between DFA-controlled territories and those outside DFA control is the imposition of uniformity on 'official' YPC prices in the former and the contrasting price variance in the latter.

In general, fuel prices in IRG areas have not been influenced by fuel supply dynamics as experienced in DFA areas. Prices of imported fuel in Yemen are influenced by the exchange rate. In IRG areas, the prices the consumer pays for fuel tend to be more directly linked to the currency exchange rate against the USD that is applied in IRG areas, which is less favourable than the one in DFA areas. The IRG-run YPC presumably tries to keep costs as low as possible, hence the closer correlation between fuel price rises and the currency depreciation in IRG areas (KIIs 04–07/2021).

Graph 4 shows the fuel price development vs. total imports into Yemen and the exchange rate in IRG areas in the first six months of 2021. Fuel prices increased from January–March, albeit to a lower extent than in DFA areas; prices have remained stable since. Generally, parallel market prices and official prices largely follow the same pattern. The continued depreciation of the currency exchange rate YER/USD in IRG areas from April 2021 onwards was not mirrored in an increase in fuel prices. The further depreciation of the rial appears to be largely attributable to the reported arrival of currency printed over the last couple of months alongside continued currency speculation (FEWSNET 05/08/2021), so the correlation with fuel prices is less. Fuel prices likely also stabilised because fuel imports were sufficient to cover market needs in the whole country and overland transport to DFA areas is less of an incentive, as the difference in fuel retail prices between the two areas of control has decreased.

Graph 4: Fuel imports in MT vs. diesel and petrol prices and the YER/USD currency exchange rate in IRG areas January–July 2021.



Sources: FAO (03/08/2021); Telegram and ACAPS' discussions with operational actors.



## OUTLOOK FOR 2021

Should the suspension of fuel imports through Al Hodeidah port be removed and import volumes return to pre-June 2020 levels:

- The import duty would be charged only by the DFA, and distribution costs through DFA-controlled areas would come down. This would give the scope for the DFA to reduce prices without loss of revenue, although it is unlikely that prices would return to mid-2020 levels.
- The IRG would lose the import duty on fuel bound for DFA areas. More new rial banknotes might be printed to finance the payment of public salaries, leading to further currency depreciation and price inflation in IRG areas.
- The economic incentive to transport fuel received in the southern ports to DFA-controlled areas would be lowered, reducing the fuel shortage in IRG-controlled areas.

If the fuel import limitations at Al Hodeidah port continue, access to fuel is expected to remain difficult:

- **Fuel prices for consumers in DFA areas are likely to remain high, while public sector salaries continue to go unpaid and income opportunities are lacking:** While fuel is available and no shortages are observed, the higher prices consumers have to pay for fuel are affecting purchasing power in DFA areas, especially those whose salaries have not been paid for some time and where alternative income options are lacking.
- **Service provision will likely see further disruption:** Services that rely on uninterrupted power supply, such as hospitals, have seen their operations affected by fuel shortages experienced before the embargo at Al Hodeidah. Continued lack of affordable fuel might further limit the extent and kind of services that health facilities offer. The same applies to the provision of clean drinking water at affordable prices, which might be affected by rising costs for water pumping and trucking.
- **With rising transportation costs, access to services will become more difficult:** It is likely that people will, for example, refrain from seeking lifesaving assistance and medical treatment, as has been reported already (HI 01/07/2021). Access to other services and support programmes, such as food or voucher distribution points, is likely to decrease as well because of transportation costs. This will put more people at social and economic risks.
- **Businesses will likely have to reduce their production and supply capacity:** The price increases also affect private sector businesses whose goods need to be transported or who use fuel as a major input for running their production lines or services. Fuel price increases or limited access to fuel could disrupt supply chains to local markets and hence the availability of certain goods, affect the production capacity of businesses, and potentially limit livelihood opportunities.

- **Agricultural production is likely to be affected by high fuel prices:** The cost of irrigating land outside the rainy season, coupled with increased costs for transport and agricultural inputs, could lead to a significant reduction in agricultural production on the part of the agricultural land in Yemen that is reliant on irrigation (KIIs 05/2021).
- **Despite the continued revenue generation through fuel imports by the DFA, revenues likely will not be used for salary payment, so the purchasing power of public sector employees will remain limited:** Improving or supporting salary payment regimes or funding of formal social protection measures (thus potentially alleviating existing needs of the population and decreasing the number of people in need) is unlikely.
- **High fuel prices throughout the country, relative to the cost of living and income levels in Yemen, are likely to remain:** Fuel prices per litre for the end consumer are high in comparison to the international market (Global Petrol Prices 02/08/2021). Reliable Consumer Price Index data for Yemen is not available, but prices likely make fuel unaffordable for many. A change in the price structure and potential lowering of prices seem unlikely in the near future.
- **The costs of implementing humanitarian operations are likely to rise:** Humanitarian budgeting and programme implementation are expected to be affected by increasing operating costs in all sectors of intervention. Higher fuel prices will lead to price rises for transportation and activities such as food distribution, flour milling, ventilated storage of goods, generator-powered activities, and the running of hospitals and health services. The fuel shortages, high prices, and associated restrictions in staff mobility might limit the range of support offered.

## METHODOLOGY

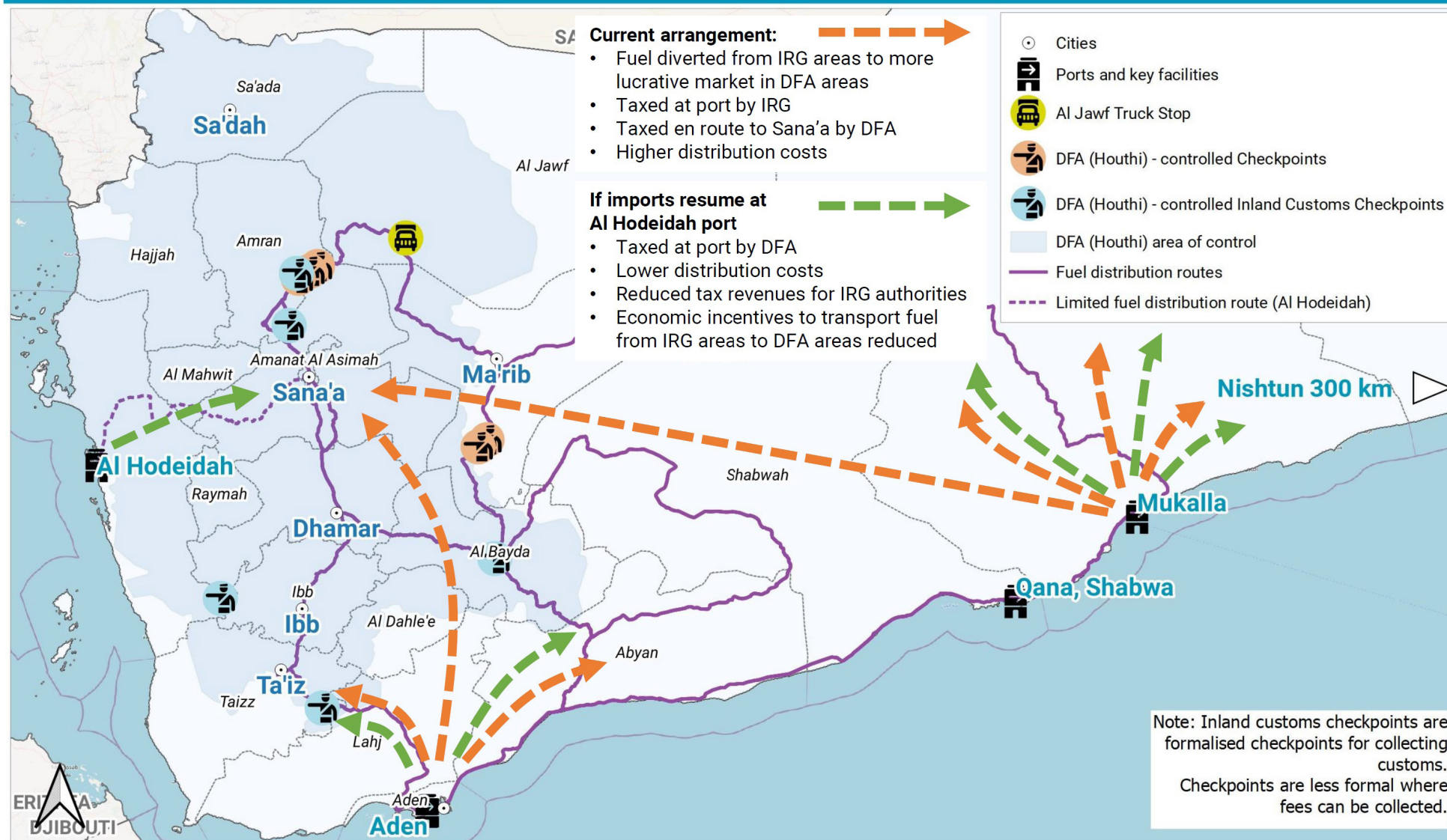
The analysis presented in this report is based on about 15 key informant interviews conducted between December 2020 and June 2021 with experts knowledgeable about Yemen's fuel supply chain dynamics and price structure. ACAPS also analysed fuel import data and prices data and conducted secondary data reviews.

## LIMITATIONS

There is a lack of transparency on this topic, and the availability of data is limited, given its politically and economically sensitive nature.

# MAIN OVERLAND FUEL DISTRIBUTION ROUTES

## Fuel Distribution Routes



Date created: 04/08/2021  
 Sources: Google Maps, OpenStreetMap, HDX, ACAPS

[www.acaps.org](http://www.acaps.org)

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