Yemen Food supply chain



EXECUTIVE SUMMARY

Yemen's food supply chain has continued to function through five years of conflict, in large part because food importers on all sides have adopted dynamic operational methods in a complex and politicised environment. This has come at a cost, however. Food prices doubled between 2015 and 2019, and continue to rise. The number of employed Yemenis has halved over the same period.¹ According to international experts, food security in Yemen continues to deteriorate and two-thirds of Yemenis are in need of food and livelihood support.² Without sustained and informed external support, the gap between the cost of food and what Yemenis can afford will steadily grow.

This report draws on key informant interviews and a survey of 218 food actors in the south and east of Yemen to examine the following questions:

- What are the key cost drivers of food prices?
- How are actors along the food supply chain adapting to these pressures?
- · What can the international community do to relieve pressure on food prices?

Exchange rate instability and challenges accessing credit are the largest cost drivers of food prices (Section 2) according to Yemeni traders and experts. The increase in food prices since 2015 is primarily a result of the drop in the value of the Yemeni riyal. Yemen is uniquely reliant on imports (for 88% of its food supply), making it highly exposed to currency fluctuations. The three main sources of food import financing and currency stability – remittances, the Saudi-funded letters of credit, and foreign aid (which accounts for 20% of wheat imports according to ACAPS estimates) – are all declining. Efforts to address the rise in food prices will likely be meaningless unless a course of action is adopted that results in stabilising the riyal or supporting incomes that keep pace with inflation.

Competition to control import financing by both parties to the conflict also adds to the cost of food. Competing letters of credit systems, divergent monetary policy, and attempts to control fuel supply chains all add to the complexity of food supply chains. Higher operating costs are passed on to consumers as higher prices (Section 3).

TABLE OF CONTENT

Recommendations	3
Section 1: A snapshot of Yemen's food supply chain	4
Section 2: Financial and logistics constraints	6
Section 3: Financial constraints prompt shift to food import financing	9
Section 4: Local market structure and value chain	13
Section 5: Impact of global COVID-19 pandemic on food imports and prices	15
Methodology	16
Reliability	16
Limitations	16
Acknowledgments	17

OUTLOOK

All three main sources of foreign currency – crucial for food import-related payments to external actors (e.g. exporters, shipping agents, etc.) and stabilising prices – face serious downside risks:

- COVID-19 has led to a decline in remittances
- the USD 2 billion Saudi deposit that pays for the food import letters of credit system is almost depleted
- foreign aid is down (USD 1.59 billion in November 2020, down from USD 3.64 billion in 2019).

¹ ACAPS, 'The end of Saudi financial support to Yemen: Scenarios', June 2020.

² OCHA, 'Humanitarian Response Plan June – December 2020', June 2020; IPC, 'Yemen IPC Acute Malnutrition Analysis January – December 2020', October 2020.

The conflict has also increased transport and logistic costs at each stage of the food supply chain

- International shipping, insurance, and demurrage costs³ have increased significantly since 2017. The price paid to the international supplier, now comprises half of the final price of wheat flour, up from one-third in 2017. International shipping and insurance costs are up 50% compared to 2017, and demurrage costs can absorb as much as 10% of the final retail price (Section 4).
- The destruction of cranes at Al Hodeidah port in August 2015, and the ban on 'commercial' containers at the port, has diverted container traffic to Aden. Aden's container handling capacity is under pressure because of high volumes, but it has continued to handle near record numbers of import containers throughout 2020.⁴ The goods passing through Aden are subject to double taxation when they are trucked north (Section 2).
- Overland transport costs have doubled since 2015. It now takes from six to nine days to transport food from Aden to Sana'a compared to one day prior to the war. Ansar Allah-established inland customs checkpoints sprung up to tax incoming commercial traffic for goods that initially entered the country via a seaport or land border crossing outside Ansar Allah control (Section 2).
- Competition to control fuel imports to Al Hodeidah port and the accompanying revenues generated from import taxes and customs led to shortages and price hikes in Ansar Allah-controlled territories in April and September 2019 and in June 2020 (Section 2).

Yemen's food importers have been largely successful in navigating these challenges, though the conflict has further narrowed what was already a concentrated market **(Section 4)**. Traders have also become reliant on cash, instead of credit, to operate their businesses. This reduces efficiency. By and large, the biggest importers continue to manage relationships with political actors in a way that ensures consistent market share and access, though margins have been squeezed along the supply chain, especially for retailers. Larger importers have been more successful in meeting the competing and conflicting regulations that have been set by the Government of Yemen (GoY) and Ansar Allah.

Domestic agriculture, though an important source of jobs and fresh produce, does not play a large enough role in staple food production to cushion against international shocks (**Section 1**). Domestic production covers less than 20% of staple food needs. Yemen's most common cereal crops are sorghum, wheat, millet, maize, and barley. A range of vegetables and fruits, both tropical and temperate, are also cultivated. Coffee and gat are the two main cash crops. The amount of land cultivated with cereal crops dropped by 50% in conflict-affected governorates such as Saada, Sana'a, and Al Bayda between 2014 and 2018.⁵ Farmers who can afford to pump water are turning to more lucrative cash crops, like qat.

COVID-19 has not had a major impact on food supply chains, apart from short-term interruptions in Aden in April and May 2020 (Section 5). Food imports appear to have recovered since then. However, future shocks, such as a decision by a major wheat exporter to hoard stocks, or a sharp drop in remittances from Saudi Arabia and the Gulf more broadly, could negatively impact food supplies and purchasing power in the coming year.

The growing gap between food prices and what Yemenis can afford to pay is likely to grow without smart and sustained investments by the international community. To help alleviate pressure on food affordability, donors and policy makers can:

- address the obstacles to financing food imports (with greater transparency to build trust in the system), help Yemeni banks reconnect with the international banking system and access accounts and foreign currency frozen abroad, and create safer and more efficient pathways for remittance transfers
- support measures to reduce the transport and logistical costs associated with supplying food, including facilitating more stable and transparent access to fuel, intervening in markets to lower war risk insurance costs, reducing delays on food inspection mechanisms, and investing in infrastructure at Yemen's ports
- scale up aid funding to increase the purchasing power of vulnerable Yemeni households through a mix of cash transfers and investment in sustainable livelihoods, including local food production
- elevate the economy file in peace negotiations, increasing pressure on parties to the conflict to scale back competing monetary, fiscal, and economic policies that are politicising and dividing the economy and distorting local food markets in Yemen.

None of these measures are easy. But the alternative – additional years of war where Yemenis must adopt increasingly desperate strategies to meet the steadily increasing gap between the cost of living and what they can afford – is worse.

³ Demurrage refers to the charges that an importer pays to a ship owner for its delayed operations of loading/unloading at the port terminal, beyond the free days offered by the shipping line. 4 Discussions with operational actors, November 2020.

⁵ Ministry of Agriculture in Sana'a.

RECOMMENDATIONS

1. Support efforts to pause and scale back competing monetary, fiscal, and economic policies that are politicising and dividing the economy, and distorting local food markets in Yemen

Elevate the importance of the economy in view of preventing further escalation of economic warfare between the GoY and Ansar Allah and the subsequent political interference in - and separation of - the economy.

2. Address current finance obstacles that are negatively impacting/distorting food supply chains and food prices for the consumer

2.1 Central Bank of Yemen (CBY) letters of credit system

2.1.1 Ensure that CBY Aden has access to new reserves of foreign currency to continue issuing letters of credit. Despite questions over the process, the reintroduction of letters of credit in late 2018 appears to have been effective in stabilising the Yemeni riyal. Without new sources of foreign exchange, the riyal will likely experience further depreciation, significantly raising the cost of food in the country.

2.1.2 Ensure the removal/reduction of the subsidy provided through letters of credit to importers. International donors have expressed dissatisfaction with the level of subsidies provided to importers through the CBY Aden letters of credit process, and this is likely affecting their desire to provide future funds. Removing this subsidy will reduce costs to CBY Aden, reduce the risk of market actors absorbing the benefit of the subsidy, and allow for other interventions more effective at targeting household needs.

2.1.3 Should it continue, ensure that any future letters of credit subsidy is passed on to consumers wherever possible. Agreements with importers should be implemented within the framework of the letters of credit process to fix profit margins on imported goods within a pre-agreed range. This will help ensure that the subsidy provided by below-market exchange rates offered on letters of credit is passed as much as possible onto consumers, and not captured by market actors.

2.1.4 Enhance transparency throughout the entire process to limit potential rent-seeking, administrative corruption, and price gouging opportunities.

2.2 Potential alternatives to the current CBY letters of credit system

2.2.1 Encourage GoY to consider the use of neutral third party/international specialised fi-

nancial institutions to manage and implement the letters of credit process, in partnership or separately from CBY Aden.

2.2.2 Explore better utilisation of humanitarian and development funding transfers toward supporting import financing of key commodities, if managed by a neutral third party.

2.2.3 Explore the possibility of partially nationalising the distribution process of key staple commodities, in order to better regulate pricing/currency fluctuations and their impact on food prices.

2.2.4 Explore alternative ways to inject foreign exchange into the market, outside of the current letters of credit system.

2.3 Other measures to improve availability of foreign exchange on the market and help stabilise the currency

2.3.1 Help Yemeni banks access foreign currency frozen abroad, notably funds stuck in Lebanese banks, especially if intended for staple food imports, and better reintegrate Yemeni banks and traders with international finance systems.

2.3.2 Better harness remittances flowing into Yemen by supporting formal financial actors in both Yemen and the Gulf, and provide more cost-effective remittance transfer alternatives to Yemeni migrant workers.

2.3.3 In the short and medium term, support additional mechanisms to restrict foreign currency access for the import of non-essential items while continuing to ease access to staple food importers.

3. Bring down the cost of transporting food overseas to Yemen and overland inside Yemen

3.1 As fuel is the biggest driver of domestic cost inputs in the food supply chain, prevent erratic fuel price spikes and aim to reduce the official price of fuel to lower food transportation and local food production costs. This could include the implementation of a neutral third party to monitor and help regulate the import, distribution, and sale process.

3.2 Lower war-risk insurance costs for food importers, possibly through donor countries assuming some of the risk through a deposited bond, to be held in escrow, to reduce potential liability of private insurers.

3.3 Reassess import security clearance and inspection frameworks in order to reduce delays and associated costs for food importers.

3.4 Restore the capacity of key Yemeni seaports to pre-conflict levels, improving capacity to import foodstuffs and reduce wait times.

4. Identify how the impact of humanitarian and development aid on food market dynamics can be improved

4.1 Explore ways in which aid financing can better support macroeconomic outcomes, keeping in mind that aid response continues to be one of the largest sources of foreign exchange available to the market. This needs to be designed in a way that prevents aid from being politicised.

4.2 Reassess the balance between the amount of in-kind food aid and cash transfers provided, with efforts to increase the scale of cash assistance.

4.3 Identify areas more sympathetic to a shift away from emergency and towards transitional, livelihood, and development programming (while maintaining capacity to respond to emergencies in areas that are still affected by conflict and natural disasters).

5. Explore various methods of supporting local food production endeavours

Increase investment in local food production for the local market through investment in rural finance, qat reduction, seed banks, community-level water projects, local value chains, and food storage and transport. Focus on local production to preserve livelihoods and improve agricultural household income.

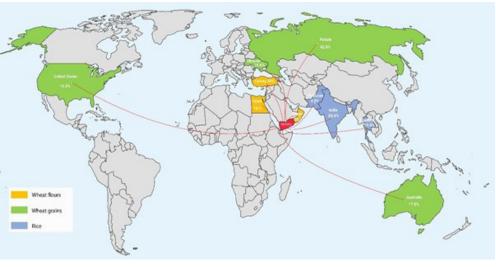
Historical overview of Yemen's food supply chain

Many of the current food supply chain challenges and constraints in Yemen stem from structural dynamics that date back decades. Throughout the 1990s, Yemen accelerated its transition to a highly import-dependent economy, especially for basic foodstuffs, as oil export revenues combined with large remittance flows from Yemeni workers abroad – many working in the Gulf Cooperation Council states – were used to support a strong domestic currency. Local food production could not remain competitive in the face of cheap imports. Agriculture shifted towards the production of local cash crops geared for the domestic market, such as qat. Structural reforms designed to liberalise the economy during the last 20 years, and make it more open and competitive, ultimately increased the market dominance of a small number of businesses closely tied to the ruling political class. This model has seen some change but remains in place today.

SECTION 1

A snapshot of Yemen's food supply chain

Yemen's main suppliers of wheat grains, flour, and rice



Source: Observatory of Economic Complexity

Note: The percentages show a country's share of the main commodity exported to Yemen. Percentages are calculated based on the total import values in USD.

Despite Yemen's heavy reliance on food imports, rising levels of food insecurity do not stem from a lack of food in the local market. The supply chain has continued functioning despite challenges posed by conflict and economic decline. Monthly import levels declined somewhat in the early years of the conflict. However, import volumes have grown considerably in the last few years as food imports from October 2019 to September 2020 were 19.4% above the pre-conflict average.⁶ The increase can possibly be explained by the increased amount of food aid entering the country. The main threat to Yemenis' food security is the ability to purchase food items.⁷

Commercial imports

Commercial imports comprise about 88% of the total available food supply in Yemen.⁸ Yemen is highly dependent on three ports for its food imports. So far in 2020, total food imports through the Red Sea ports (Al Hodeidah and Saleef ports) accounted for 58% of total

⁶ Discussions with operational actors.

⁷ IPC, 'Yemen IPC Acute Food Insecurity Analysis: July – December 2020', July 2020.

⁸ Caccavale, Flämig, and Hachandi, 'Food Markets in the Time of Conflict and Cholera. Rapid Market Assessment in Yemen (Sana'a, Hodeidah and Hajjah', WFP Yemen, April 2018.

food imports, followed by Aden (35%). Small quantities of food also come through Mukalla port (3%) and through the last remaining land border with Saudi Arabia, Al Wadiah (2.6%). Food shipped through the Shahen border crossing from Oman to Yemen accounts for less than 2% of total food imports and is bound almost exclusively for Yemen's sparsely populated Mahara governorate.⁹

Wheat is the main food staple in the country and the most imported food commodity. Yemen's main sources of imported wheat grains are Russia, the US, and Australia. In 2017, wheat grains and flour accounted for 69% of total food imports, followed by corn (11%), sugar (9.5%), soya (5%), rice (3.6%), and vegetable oil (1.5%).¹⁰ In 2019, wheat (both grains and flour) comprised 80% of total food imports.¹¹ In 2019, the Red Sea ports (AI Hodeidah and Saleef) accounted for 60% of total wheat imports to Yemen, followed by Aden (37%).¹²

The food import market in Yemen tends to be dominated by a few major companies that can handle large-scale commercial food imports and have the political and financial clout to navigate Yemen's divided and politicised economic landscape. Both the impact of the conflict and constrained access to import financing have led to some limited changes in the overall market dynamics, logistics, and price structure over the last five years, however, the consistent dominance of a small number of traditional large import businesses has remained (see Section 4).

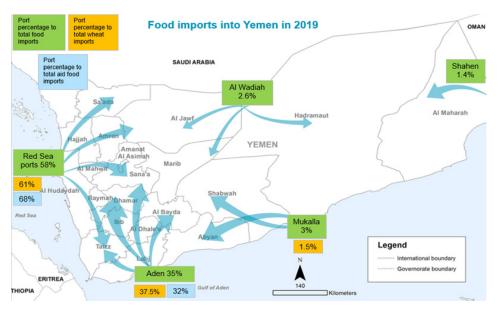
Aid imports

Despite a functioning import system, aid plays a significant role in Yemen's food supply chain, with 13.5 million people targeted for humanitarian food assistance in 2020.¹³ Food imported directly for distribution by the aid sector made up an estimated 14% of total food imports through seaports in 2018 and 2019, according to data shared with ACAPS by operational actors. Wheat grain and flour alone account for about 80% of all in-kind imported food aid. In 2019, imported wheat for aid accounted for about 20% of total wheat imports.¹⁴

Food aid import levels are growing fast. Total food aid imports through the ports of Aden, Al Hodeidah, and Saleef grew by 57% between January and August 2020 compared to the same period in 2019, and by 66% compared to the same period in 2018.

By comparison, commercial food imports decreased by 3.5% between January and August 2020 relative to the same period in 2019.¹⁵ However, reductions in humanitarian funding will likely see food aid imports decline in early 2021.

WFP mainly imports its own food into Yemen. Most other international aid organisations buy food items from Yemeni importers; ACAPS estimates this might reach 6% of the total humanitarian food aid imports. The distribution of food aid baskets covers 20% of Yemen's monthly imported food needs, or 9% of the total food supply in the country.¹⁶ Foreign aid is also an important source of hard currency that the private sector relies on to finance food imports.¹⁷ Declining foreign aid funding could put further upward pressure on food prices, both by reducing the supply of food coming into the country, and by reducing the availability of hard currency in the financial system to fund food imports.



Sources: Port of Mukalla, Port of Aden, Port of Al Hodeidah and ACAPS' discussions with operational actors

16 Ibid.

17 ACAPS, 'Volatility of the Yemeni Riyal: Drivers and impact', 29 January 2020.

⁹ Discussions with operational actors.

¹⁰ Discussions with operational actors.

¹¹ This percentage is calculated based on total food imports, which include wheat grains, flour, rice, sugar, and vegetable oil. Data on imported food commodity volumes is taken from Mukalla, Aden, and Al Hodeidah (combined with Saleef), seaport websites. 12 Data from seaport websites and discussions with operational actors.

¹³ IPC, 'Yemen: Integrated Food Insecurity Phase Classification Snapshot October 2020 - June 2021', 3 December 2020.

¹⁴ This estimate is based on comparing publicly available 2019 port data from AI Hodeidah and Saleef, WFP data, and an April 2018 rapid market assessment by Caccavale, Flämig, and Hachandi (see footnote 5). The time periods and data collection methodologies from each source do not align. This finding should be treated with some caution. However, ACAPS believes this provides a reasonable approximation of the role that food aid plays in Yemen's food supply chain. 15 Discussions with operational actors.

Main factors affecting food prices in Yemen

Local food production

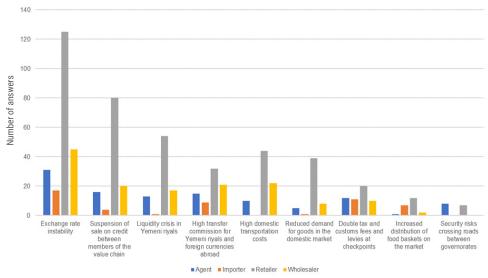
Yemen's total domestic cereal production contributes less than 20% of all utilisation needs, while domestic production of wheat contributes between 5% and 10%.¹⁸ These low figures underscore Yemen's dependence on imported foodstuffs, which in turn are driving food insecurity and increasing the country's vulnerability to price shocks driven by currency depreciation or international market fluctuations.

Wheat, the main staple food in Yemen, has become more expensive to grow because of increasing production costs, notably water pumping for irrigation. The average price of cereals increased by 67% on the rural market between 2014–2018, including wheat (which also increased by 67%) and millet (which saw the highest increase with 72%).

The effect of these price increases can be seen in domestic cereal production levels in recent years, with production rates in 2016, 2017, and 2018 about half their pre-conflict levels. Many farmers are simply giving up cultivating land, with total cultivated areas falling by 31% between 2014 and 2018.

The broader explanation for the decline in production levels between 2016 and 2018 is conflict. In 2016, cereal production in the governorates of Saada, Sana'a, and Al Bayda governorates declined by half as heavy fighting raged, compared to a slight reduction in the quieter south and east governorates. In 2018, when fighting intensified in Al Hodeida, cereal production similarly declined by 8%. An official agriculture data specialist has specifically linked the destructive impact of the war to the agriculture sector's woes. Some research indicates that during the first two years of the conflict, Saudi-led coalition airstrikes consistently targeted agricultural infrastructure.

Production has since started to recover, beginning in 2019 in the northern governorates thanks to a period of relative stability. The recovery was aided by a robust rainy season and intervention programmes that supported farmers with improved seeds and other resources. Still, overall national production is 34% below 2014 levels, and almost half of the harvested cereals in 2019 was sorghum, a rain-fed crop that provides large fodder output needed for the more lucrative business of raising livestock.¹⁹



Source: ACAPS survey with support from operational actors, July-August 2020.

Note: the respondents included 125 retailers, 45 wholesalers, 31 agents, and 17 importers from Abyan, Aden, Hadramout, Lahj, and Taiz. Multiple answers were possible in the survey.

SECTION 2

Financial and logistics constraints

Prices continued to rise this year for all commodities. ACAPS (and partners') survey results have highlighted a series of constraints that are affecting food prices in Yemen. They can be broadly divided into two main categories: financial and logistics constraints.

Challenges related to the financial sector dominate the top of the list. Exchange rate instability was identified as the main driver of local food prices in Yemen by all survey participants – importers, wholesalers, agents, and retailers alike. Exchange rate devaluation and instability increase costs along the supply chain and result in higher food sale prices. The identification by the retailers of suspension of credit as one of the main factors is significant for both retailers and consumers. Before the conflict, it was common for Yemeni households to purchase goods on credit from their local retailer and accumulate debt over time before having to clear

¹⁸ FAO, 'GIEWS Country Brief Yemen', 10 June 2020; FEWS NET, 'Yemen Food Security Outlook October 2020 to May 2021', 1 December 2020. 19 The analysis for this section is based on a dataset available on the website of the Ministry of Agriculture in Sana'a.

some of that accumulated debt. With that option less readily available, an importing coping mechanism for Yemeni households has effectively been removed.

Food supply chain survey respondents reported that less demand is among the greatest challenges they face, with many attributing the drop to a reduction in purchasing power and diminishing income among consumers. A reduction in demand leads to increased prices as reduced demand reduces overall profit for businesses. Retailers are compelled to increase their margin on the price, which results in a further drop in demand as less consumers can make purchases at the new prices (or at a lower frequency).

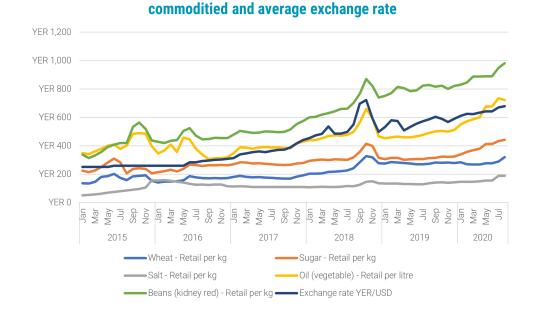
On the logistics side, the increased cost of internal transportation and reduced demand for goods are both major drivers of food prices, mostly cited by retailers. Overall, the security situation seems to be less of a problem. However, many of these constraints are a consequence of the conflict and the competing measures imposed by Ansar Allah and the GoY.

Food price drivers identified by traders correspond largely to those reported by the World Bank, suggesting that in over three years, no effective solution has been adopted to reduce their effect on final food retail prices.

Currency instability

According to WFP market monitoring, consumer prices of many imported staple foods increased by more than 100% between 2014 and 2019 – notably rice (248%), wheat (110%), and wheat flour (98%).²⁰ These price rises largely reflect changes in the YER-USD exchange rate during the conflict. The rising level of food insecurity in Yemen does not stem from a lack of food on the local market, but rather people's decreased ability to purchase food items. Reduced purchasing power is a result of a variety of factors: local currency depreciation, reduced income, and less employment as well as a lack of salary, pension, and social welfare payments.

Financial constraints faced by food merchants and the various techniques employed to circumvent such constraints have had a direct impact on the value of the riyal and, as a result, on food prices and consumer purchasing power. Of note is the close correlation between the value of the riyal and food prices.



Correlation between national average price for top 5 imported

Source: WFP VAM

The correlation is particularly noticeable during periods when the riyal has depreciated and the market then adjusts to new, higher rates. From 2015 onwards, importers came to rely more on informal financial networks to secure foreign currency and pay exporters. The (unregulated) demand for foreign currency put huge downward pressure on the riyal. As importers looked to protect themselves against its depreciation and political uncertainty, they bought up and essentially sucked out foreign currency from the market. This led to a further depreciation of the riyal in 2017 and 2018. When considering the concentration of food imports within the hands of a relatively small group of importers, the impact is magnified.

There does not seem to be a correlation between the riyal's appreciation and lower prices. One plausible explanation for this discrepancy is that when the riyal has rebounded, as was the case in November 2018, local retailers may look to maintain higher prices to either recoup losses during earlier periods of accelerated depreciation and high risk, or to account for purchases made at less favourable exchange rates.²¹

²⁰ WFP Vulnerability Analysis and Mapping (VAM) dataset. 21 Sana'a Center, 'The Yemen Review – November 2018', 8 December 2018.

Both the GoY and Ansar Allah have tried to regulate food prices during these periods of currency instability. Their ability to do so, however, is undermined by the fact that they are competing with one another and therefore have enacted competing regulations that make food trader operations difficult. It is expected – and somewhat understandable – that traders would adjust their prices to reflect fluctuations in the local currency and be cautious about disclosing their respective costs relative to income as they jostle with their competitors. Those involved in the food supply chain are also operating in a challenging business environment, which is subject to political interference, and one in which they must contend with high levels of political and economic uncertainty as well as anxiety over the impact that exchange rate fluctuations have on their respective operations.

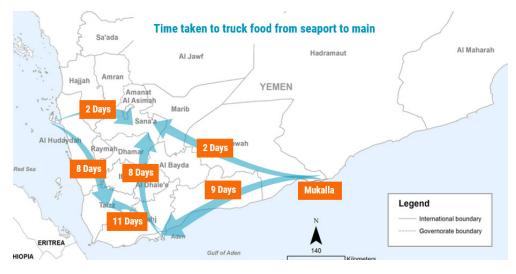
Seaports operating below capacity

Although the key challenge for importers relates to acquiring foreign currency at a reasonable exchange rate,²² the increased time taken to bring food into Yemen's seaports has also played an important role in driving up costs.²³ Shipping fees remain much higher in 2020, due in large part to delays caused by the Saudi-led coalition's inspection and clearance mechanisms.²⁴ Higher shipping fees are also a consequence of the fact that Yemen is at war, hence insurance/war premiums have increased. The destruction of cranes at Al Hodeidah port in August 2015, and the ban on 'commercial' containers at the port, has diverted container traffic to Aden. Aden's container handling capacity is under pressure because of high volumes, but it continues to handle near record numbers of import containers in 2020.²⁵ Average times at anchorage in October 2020 were lower than average (between six to 17 days) over the previous six months at all seaports, but were still above pre-conflict times.²⁶

The destruction caused by airstrikes of the gantry cranes at AI Hodeidah in August 2015 resulted in containers being offloaded using ship cranes. This has reduced container traffic at the port and pushed traders to import more containers via Aden and then truck them overland to Sana'a, which results in double taxation. The reduced container traffic at AI Hodeidah port has also negatively impacted the local economy given that many people relied on the container facility as a source of income. People in northern areas are now dependent on the south for containerised food.²⁷ Importers, agents, wholesalers, and retailers echoed this view in interviews, with many specifically citing the consequences of the damage to AI Hodeidah port, and its impact on increasing transportation costs.

Overland transportation and customs

Damages to road infrastructure due to the conflict, and the set up of checkpoints between areas controlled by different authorities have inevitably led to more complicated overland food transportation across the country. For instance, it now takes between six and nine days to transport food from Aden to Sana'a compared to one day prior to the war. This entails added costs related to internal taxation schemes used to extract rents from the movement of goods and people around Yemen – particularly from GoY to Ansar Allah-controlled territories.²⁸ These range from checkpoints along key supply routes where armed groups demand ad hoc payments to secure the safe passage of vehicles, to the more formalised taxation of goods at the inland customs checkpoints of Dhammar, Al Baydah, and Amran entering Ansar Allah areas.²⁹ These can be burdensome for drivers who must ensure they have enough cash to pay the various levies, which individually are not large, but add up and increase the overall cost of distributing food in Yemen.³⁰



Source: ACAPS survey with support from operational actors, July–August 2020.

Note: The number of days reported on the map is an average of all answers from the survey. Answers are self-reported and ACAPS could not reach the respondents again for clarification after data was analysed. No reliable data was provided for the route from Mukalla to Sana'a. Partners on the ground suggested to ACAPS that trucking time from Aden to Taiz is shorter than 11 days, and more likely closer to 2 days.

²² ACAPS surveys.

²³ Qasem and Scott, 'Navigating Yemen's Wartime Food Pipeline', DeepRoot Consulting, November 2017; World Bank, 'Securing Imports of Essential Food Commodities to Yemen. An Assessment of Constraints and Options for Intervention', 2017. 24 Ibid.

²⁵ Discussions with operational actors, November 2020.

²⁶ Qasem and Scott, 'Navigating Yemen's Wartime Food Pipeline', DeepRoot Consulting, November 2017; discussions with operational actors, November 2020.

²⁷ ACAPS interview with an official at Hodeida port in September 2020.

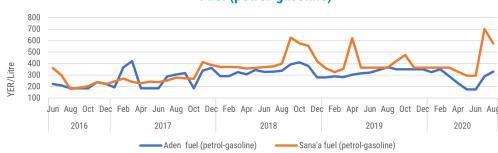
²⁸ Per data shared with ACAPS by a food importer in April 2020.

Several importers have facilities – including milling and storage – along with their company headquarters in Ansar Allah-controlled territories, meaning they are conscientious about paying taxes to the group. For these big market players, arrangements are typically made in advance for importers bringing in food via entry points outside of Ansar Allah control – such as Aden Port – so that their trucks are not stopped at checkpoints, including inland customs.³¹ These importers do not always pay customs because Ansar Allah recognises that it receives sufficient income through other forms of indirect taxation on banks, businesses, and money exchange companies.³² According to food traders in the south, local transport costs account for 2% to 3% of the total retail price of food in Yemen (see Section 4).

The varying cost of fuel

Diesel is one of the most prominent costs associated with overland food transportation. At the start of the conflict, diesel was effectively subsidised through its inclusion among several essential commodities (fuel and food) covered by the letters of credit system overseen by CBY Aden.33 However, it was a big drain on the GoY's foreign exchange reserves, so the bank ceased the practice in 2016.34 Fuel has since experienced spikes and shortages on multiple occasions throughout the conflict, notably in March, April, and September 2019. In June 2020, fuel import activity through Al Hodeidah port was suspended because of incompliance with fuel import regulations. Few ad hoc shipments were then allowed by the GoY from July to September. Fuel import activity through Al Hodeidah started returning to normal in October and November.

Prices of diesel and petrol in Sana'a and Aden



Fuel (petrol-gasoline)

Source: WFP VAM

The fuel market in Ansar Allah-controlled territories is highly centralised. The Ansar Allah-run Yemen Petroleum Company (YPC) has a strong hand over internal fuel dynamics within areas under its control – including setting fuel prices and taxation of fuel brought in from other areas. The YPC has both raised and lowered the price of fuel throughout the conflict to suit its and Ansar Allah's interests.³⁵

SECTION 3

Financial constraints prompt shift to food import financing

Since 2015, Yemeni food importers have faced a growing number of financial and institutional constraints imposed by the war's physical and economic dimensions. The major financial constraints faced by importers include:

- reduced access to foreign currency and letters of credit from the CBY, owing to decreased foreign currency supplies
- reduced access to correspondent accounts as a result of classification of Yemeni banks as 'high-risk'
- reduced access to credit a problem that permeates the food supply chain.

After Saudi Arabia intervened in the conflict in March 2015, hydrocarbon exports from Yemen were gradually suspended (and are still yet to recover to pre-conflict levels), resulting in the loss of the country's biggest source of revenue – foreign currency – and primary means of

32 Ibid; Sana'a city remains Yemen's economic hub and is where the majority of banks, businesses, and money exchange companies are located and headquartered.

Fuel (diesel) 1150 950 YER/Litre 750 550 350 150 Aug Oct Dec Feb Oct Dec Feb Apr Jun Aug Oct Dec Feb Apr lun Anr lun Oct Foh lun 2016 2017 2020 2018 2019 Aden fuel (diesel) Sana'a fuel (diesel)

³¹ ACAPS interviews with independent Yemen experts who examined Yemen's food supply chain dynamics in June 2020.

³³ Sana'a Center, 'Yemen Economic Bulletin: Lebanon's Financial Collapse Traps Yemeni Banks' Money', 8 May 2020.

³⁴ Ibid.

³⁵ Interview with an independent researcher, September 2020.

maintaining a fragile monetary, fiscal, and economic stability. In 2014, hydrocarbon exports accounted for approximately USD 6.4 billion and 36% of foreign currency inflows.³⁶ The loss of foreign currency from hydrocarbon exports led to the CBY using Yemen's foreign currency reserves to preserve a letters of credit system that demonstrates traders have access to foreign currency inside the country. This was used to facilitate the import of essential food and fuel commodities, and to protect the value of the rival, and maintain exchange rate stability. As foreign currency reserves dwindled - CBY foreign currency reserves fell from USD 4.7 billion in December 2014 to less than USD 1 billion in September 2016 - CBY reduced the scope of letters of credit to cover select food commodities (e.g. wheat) after eliminating coverage for fuel and sugar. CBY also responded by limiting the ability of foreign currency account holders to withdraw funds as well as Yemeni banks' ability to sell foreign currency to fuel importers. In 2015, Yemeni food importers also found their access to key correspondent accounts in Western Europe and Canada restricted following additional de-risking measures taken against Yemeni banks. De-risking policies implemented in relation to Yemeni banks in 2015 left Yemeni banks and traders more dependent on correspondent accounts held at Lebanese banks, which would later prove costly following the onset of the Lebanese banking and financial crises in November 2019.37

President Abdrabbu Mansour Hadi and the GoY used the pretext of reduced foreign currency reserves to stoke claims that Ansar Allah was dipping into state coffers to fund its war effort. This line of argument was used to justify the order that President Hadi made in September 2016 to relocate the CBY headquarters from Sana'a to Aden.³⁸ The transfer of the CBY headquarters led to the division of the CBY and left Yemen with two competing central banks, CBY Aden and CBY Sana'a. It also marked the onset of economic warfare that continues to escalate – encompassing competing monetary, fiscal, and economic policies and regulations – prompting a fragmentation of the economy, the local currency, and the domestic market.

From 2015 through to November 2018, the CBY and the formal banking system as whole became a less reliable option for Yemeni food merchants looking to secure foreign currency and transfer money to external actors (e.g. exporters, shipping agents, and insurers) in order to facilitate their import activity. Since 2015, food importers came to rely more on informal financial networks in which money exchangers and hawala³⁹ agents operate to help importers secure foreign currency and to pay external actors. These networks helped food importers tap into remittance flows, as remittances have replaced hydrocarbon revenues as the primary source of foreign currency for Yemen during the conflict.

The problem, however, is that with the CBY unable to regulate the demand for foreign currency via a letter of credit system, the increased importance and use of informal financial networks brought with it added pressure on the riyal as importers competed with one another to access foreign currency. With the GoY and CBY Aden unable to regulate the demand for foreign currency among importers because of insufficient foreign currency flows and the weak institutional capacity of CBY Aden, the market was left to its own devices and the value of the riyal depreciated in 2017 and 2018. The injection of foreign currency from Saudi Arabia and the rolling out of a new letters of credit system from CBY Aden to cover the import of essential food commodities helped stem the rapid depreciation of the riyal between July and October 2018.

The competition over food import financing

The distortion to the local food market in Yemen is a direct symptom of the two competing food import finance systems that are overseen by GoY/CBY Aden and Ansar Allah/CBY Sana'a, which are facets of the broader economic warfare between both sides. The competing attempts to regulate import activity in conjunction with competing monetary and fiscal policies has significantly complicated the process of financing food imports, internal distribution, and the sale of food commodities.

CBY Aden and the letters of credit system premised on Saudi financial support

The revised letters of credit system that CBY Aden began implementing from November 2018 onwards was based on the USD 2 billion deposit that Saudi Arabia provided CBY Aden in March 2018. CBY Aden issued letters of credit underwritten by funds allocated from the Saudi deposit and used them to facilitate the import of five basic commodities – wheat, rice, sugar, milk, and cooking oil. The USD 2 billion deposit and the additional financial support that Saudi Arabia provided to the GoY and CBY Aden helped stabilise the value of the riyal.⁴⁰ In order to gain access to the letters of credit and foreign currency allocated from the Saudi deposit, food importers must gain approval from CBY Aden, and/or Yemeni banks representing food importers must deposit the cash equivalent of the foreign currency covered in the letters of credit in riyal at accounts held at CBY Aden. Neither electronic transfers nor cheques were (and are still not) accepted. Funds from the Saudi deposit, which are released in batches, are deposited in a GoY/CBY Aden account in Jeddah before the equivalent funds are electronically wired to the importer's correspondent account.

³⁶ Ministry of Planning & International Cooperation, 'Yemen Socio-Economic Update 2018', February 2018.

³⁷ Up to USD 240 million in deposits from Yemeni banks are currently trapped in the Lebanese banking system, which is currently experiencing a major collapse after the Lebanese government defaulted on its external debt obligations in March 2020; Sana'a Center, 'Yemen Economic Bulletin: Lebanon's Financial Collapse Traps Yemeni Banks' Money', 8 May 2020.

³⁸ Reuters, 'Yemen president names new central bank governor, moves HQ to Aden', 18 September 2016.

³⁹ Hawala is an informal method of transferring money without any physical money actually moving. Hawala is used today as an alternative remittance channel that exists outside of traditional banking systems. Transactions between hawala brokers are made without promissory notes because the system is heavily based on trust and the balancing of hawala brokers' books.' Investopedia, 'Hawala', 29 April 2020.

⁴⁰ ACAPS, 'The End of Saudi Financial Support to Yemen: Scenarios', 9 June 2020.

The economic rationale behind the CBY Aden letters of credit system was to provide greater stability to the riyal and to food prices. Following the revision of the letters of credit system in November 2018, CBY Aden offered merchants that imported these food commodities access to the Saudi deposit at a below-market exchange rate of YER 440 per US dollar.⁴¹ This rate increased in November 2019 to YER 530 per dollar, following the drop in the official exchange rate to YER 620 per dollar. Therefore, despite the increase, the exchange rate tied to the Saudi deposit was still below the official exchange rate.⁴²

The thinking behind the below-market exchange rate was that the benefits would be passed on to the consumer.

In practice, however, several structural and implementation issues emerged following the introduction and implementation of the CBY Aden letters of credit system, including:

- lack of monitoring and transparency throughout the process, starting with CBY Aden and the process of awarding of letters of credit to food importers, as well as scant details provided by food importers themselves regarding the pricing of food items imported via shipments covered by the letters of credit and the accompanying below-market exchange rate⁴³
- lack of accessibility for all importers, which offers an advantage to importers that can more easily engage with the CBY Aden letters of credit system⁴⁴
- lack of certainty for some importers over whether letters of credit approval then translates to the release of slated funds from the Saudi deposit and transfer to the importer's bank account, with applications stalling and transfers delayed from Saudi Arabia (thetrustee) to CBY Aden (the middle agent) to the importer despite letters of credit being awarded⁴⁵
- the award of letters of credit is not based on market demand, with an alleged imbalance over the number of letters of credit and funds allocated from the Saudi deposit for certain food commodities compared to others⁴⁶
- absence of a scheduled timeline for the release of funds from the Saudi deposit, with Saudi Arabia and CBY Aden adopting a more ad hoc approach that creates a degree of uncertainty among traders and Yemeni banks

 ignoring key political, financial, and market constraints that limit the importers' ability to meet CBY Aden conditions for the award of letters of credit, such as the demand that importers and/or Yemeni banks representing food importers must deposit the equivalent riyal in cash directly with CBY Aden within a one-week timeframe.⁴⁷

Critics of the letters of credit system include food merchants, senior Yemeni banking officials, GoY officials, and international NGO staff that are involved in different aid programmes that seek to address food insecurity in Yemen, among others.⁴⁸ Some critics view the letters of credit system as being implemented in a way that promoted certain importers and marginalised others, in addition to perpetuating a food subsidy programme that allows importers to accrue the benefits intended for the consumer. Claims of perceived favouritism may not, however, always take into account the series of escalatory steps that Ansar Allah and CBY Sana'a took from November 2018 onwards in view of preventing importers whose business operations and assets are located in Ansar Allah-controlled territory from engaging with the CBY Aden letters of credit system.

Ansar Allah response and competing food import financing system

In direct competition with GoY, CBY Aden and CBY Sana'a, Ansar Allah adopted its own multipronged food import financing strategy. The first main objective is to limit the ability of importers whose assets and operations are concentrated in Ansar Allah-controlled territories to easily engage with the GoY/CBY Aden letters of credit system. This has been achieved through a series of escalatory monetary controls and banking regulations with compliance ensured through strict monitoring and enforcement measures. The pursuit of this first main objective is consistent with Ansar Allah and CBY Sana'a attempts to assert their authority over Yemen's financial and trade systems and undermine the GoY's and CBY Aden's attempts to do the same. It is also based on Ansar Allah and CBY Sana'a liquidity concerns and a desire to preserve existing liquidity in Ansar Allah-controlled areas and prevent the loss of liquidity to areas outside its control.

The second main objective is to secure access to foreign currency at a below-market exchange rate for select food importers to incentivise them and enable them to compete. The increased constraints on food traders and Yemeni banks and their engagement with the CBY Aden letters of credit system subsequently leaves many with little option but to either work within the Ansar Allah and CBY Sana'a food import financing system or via the open market – accessing foreign currency through other means, such as via money exchange companies and/or hawala networks.

⁴¹ Sana'a Center, 'Yemen at the UN – June 2018 Review', 17 July 2018

⁴² Interview with GoY official on 25 May 2020.

⁴³ Ibid.

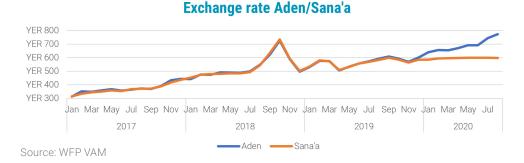
⁴⁴ ACAPS interviews with food importers on 9 and 20 September 2020 as well as senior Yemeni banking officials on 10 and 28 September. 45 ACAPS interviews with a food importer on 20 September 2020 and a senior Yemeni banking official on 10 September 2020. 46 ACAPS interviews with a food importer on 20 September 2020.

⁴⁷ ACAPS interviews with a food importer on 20 September 2020 and a senior Yemeni banking official on 10 September 2020.

⁴⁸ ACAPS interviews with food merchants, senior Yemeni banking officials, GoY officials, and INGO staff in September 2020.

In accordance with the first objective, Ansar Allah and CBY Sana'a introduced a series of escalatory measures from November 2018 onwards that aimed to counter the GoY/CBY Aden's letters of credit system and prevent the loss of liquidity from Ansar Allah-controlled areas to GoY-controlled areas. On 4 November 2018, CBY Sana'a issued a circular directed at Yemeni banks demanding that they issue cheques rather than hard cash if importers wished to open letters of credit with CBY Aden. This made it difficult for importers to comply with CBY Aden cash deposit requirements. CBY Sana'a warned banks about non-compliance. This warning was taken seriously given Ansar Allah's track record of acting on such threats by detaining staff, monitoring and freezing accounts, and even closing banks.⁴⁹ In March 2019, CBY Sana'a reportedly banned Yemeni banks from opening letters of credit with CBY Aden for any food importers headquartered in Sana'a.⁵⁰ The ban was largely motivated by concerns that the GoY and CBY Aden food, medicine, and fuel import regulations would result in the movement of hard cash from Ansar Allah-controlled areas to those nominally under GoY control.⁵¹ On December 18, 2019, CBY Sana'a barred people from using the newly printed rival banknotes issued by CBY Aden after September 2016.52 An earlier ban applied only to Yemeni banks, businesses, and money exchangers. Yemenis were given 30 days to hand over newly printed banknotes in their possession (capped at YER 100,000) in exchange for 'old' banknotes (those printed before September 2016) or an electronic currency known as the e-rival. CBY Sana'a said the move was necessary given the risk of inflation as a result of the government printing YER 1.7 trillion.53

The blanket ban on newly printed Yemeni banknotes in Ansar Allah-controlled territories has led to a fracturing of Yemen's local currency and a widening gap between the two exchange rates in Sana'a and Aden.⁵⁴ The ban puts further constraints on banks, traders, and money exchangers who are trying to adjust to the new market realities, including more shortages of old banknotes in the market.⁵⁵



As noted above, the presence and enforcement of two food import finance systems, as well as competing monetary policies, are among the main contributing factors behind the distortion of the local food market in Yemen. Increased market divergence between Ansar Allah-controlled territories and areas outside Ansar Allah control has resulted in the use of (effectively) two different currencies and food traders adjusting their prices in response to new market realities.

Looking ahead and the need for change

In preparation for the eventual depletion of the Saudi deposit, and in the absence of additional financial support and fresh injections of foreign currency, CBY Aden has reportedly turned to using other sources of foreign currency to sustain the letters of credit system. This entails utilising some of the SAR 385 million (USD 100 million) that Saudi Arabia has been providing to the GoY/CBY Aden account at AI Ahli Bank of Yemen since mid-2019 for the payment of GoY military salaries. But this emergency measure will likely create separate problems for the GoY as soldiers who have not received their salaries in months are growing increasingly frustrated. Recently, retired southern military officers in Aden blocked access to Aden Port in protest of their overdue salaries.⁵⁶

50 Sana'a Center, 'The UN's Stockholm Syndrome - The Yemen Review, March 2019', 8 April 2019.

- 51 As noted by the Sana'a Center in November 2018, "The cash liquidity crisis in Yemen which set in dramatically through 2016 resulted in domestic cash being overvalued in the market relative to checks. Forcing banks to supply cash to pay for importer LCs would thus pass on this overpricing, meaning importers, when they sold their foodstuffs on the market, would do so at higher prices to recoup the difference." Sana'a Center, 'The Yemen Review November 2018', 8 December 2018.
- 52 Sana'a Center, 'Yemen Economic Bulletin: The War for Monetary Control Enters a Dangerous New Phase', 21 January 2020.

⁴⁹ As illustrated by the detention of three Tadhamon International Islamic Bank staff in February 2019 and the detention of International Bank of Yemen General Manager Ahmed Thabet for a three-month period from July–October 2019, such threats should be taken seriously. 17 of the 18 banks operating in Yemen are headquartered in Sana'a, except for the National Bank of Yemen – also known as Al Ahli Bank, which is headquartered in Aden.

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ Ibid

⁵⁶ Ali Mahmood Mohammed, Twitter, 29 September 2020; Risk Intelligence, Twitter thread, 9 October 2020

It is imperative that domestic and international actors acknowledge the warning signs and Yemen's bleak economic outlook. Yemen is suffering from an alarming balance of payments problem that it cannot resolve on its own, as a result of insufficient revenues and the amount of foreign currency entering the country. The current level of public finance revenue and foreign currency is not enough to cover state expenditures and meet importers' needs.

Hydrocarbon revenues were the primary source of revenue and foreign currency for Yemen prior to the current conflict but they remain far below pre-conflict levels and have decreased further still in 2020 because of a drop in global oil prices in March and April 2020. Remittances and humanitarian funding, which during the conflict have become the first and second primary source of foreign currency entering the country, have also declined sharply in 2020.

SECTION 4

Local market structure and value chain

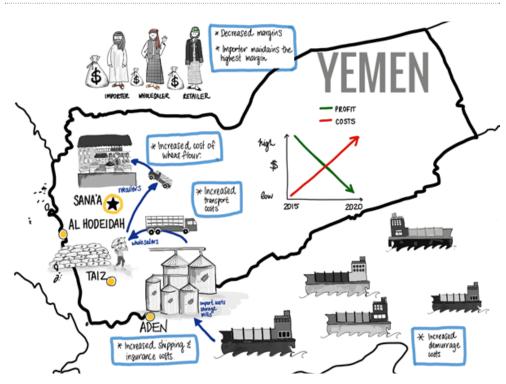


Illustration by Sandie Walton-Ellery

This illustration shows most of the factors that have contributed to the increased price of wheat flour, based on the survey conducted by ACAPS' operational partners.

Both the impact of the conflict and constrained access to import financing have led to some limited changes in overall market dynamics, logistics, and price structure over the last five years. A small number of large, traditional import businesses remains consistently dominant, however. The access and coverage of these actors has in some cases changed according to the areas in which they operate and their affiliation with political actors in those areas. Generally, the largest importers continue to manage relationships with political actors around the country in a way that ensures consistent market share and access. The size of the importer also affects the leverage it holds over political actors and their ability to handle the competing and conflicting regulations that have been set by the GoY and Ansar Allah via CBY Aden and CBY Sana'a.

The question of profiteering

ACAPS' survey analysis suggests that overall profit margins for wheat flour decreased in 2020 compared to April 2017, and confirmed that importers and retailers still maintain the highest profit share compared to wholesalers. This is explained by the fact that importers maintain a relative dominance and are the price setters for imported commodities. Retailers hold the second-largest share as they reach far away areas and mostly sell in kilograms on a larger scale. Wholesalers earn less, but compile large amounts generated from their wide retail client network.

Questions over the amount of profit food supply chain actors make persist, even after the introduction of the letters of credit system in November 2018 and the benefits tied to the below-market exchange rate. Although the letters of credit system appears to have helped stabilise prices after a volatile period, it is difficult to determine whether the benefits of the subsidy have been passed on to consumers or pocketed by actors along the supply chain. There is no incentive for traders to report windfall profits in any economy, let alone in a highly politicised context like Yemen.

Changes in imported wheat flour price structure: Aden to Taiz case study

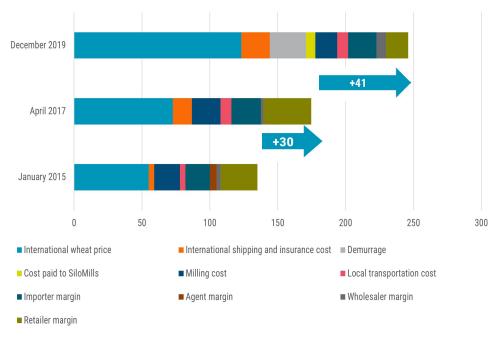
To try to understand how the wheat flour value chain has changed since April 2017 – the last time the topic was studied (by the World Bank, published May 2018) – ACAPS used self-reporting data from food actors trading in wheat flour imported through Aden Port and sold in the local market in Taiz.⁵⁷ We asked traders to report on costs and margins at ten stages of the value chain (see table below). According to respondents, wheat flour prices increased by 71% between January 2015–December 2019 and by 41% between April 2017–December 2019. The three largest cost drivers are the increase in the international wheat price (up by 69% since April 2017), international shipping and insurance costs (up by 50% since April 2017), and new added costs for demurrage (10% of the final price). Heightening warfare competition over ports and ad hoc duplication of regional and UN inspection procedures pushed onshore shipping costs up significantly and contributed to the inflation of staple food retail

⁵⁷ World Bank, 'Yemen Food Imports: A focus on Critical Challenges and Priority Interventions', 29 May 2018.

prices. The price paid to international wheat suppliers constitutes half of the final market price. By comparison, in 2015 and 2017, the international wheat price only constituted one-third of the final price.

Profit margins have decreased for importers and retailers by 3% and 54% respectively. Prices are self-reported, however, and all calculations are based on the average of all answers for traders in Taiz (and one importer who answered from Aden). The significant increase (of 249%) in the margin share for wholesalers is most likely a result of a lack of reported additional costs. The total profit margins represent 18% of the final price. The prospect of conflict – and in some cases ongoing fighting – has forced food distributors to select alternative delivery routes which, as well as being long, costly, and risky, have doubled the local distribution cost of imported food from the inflow ports and governorates' markets, contributing to higher prices for local consumers. Overall, the final price increased by 41% compared to the market price for wheat flour in April 2017.

Wheat flour price structure (YER/Kg)



Source: World Bank, May 2018 and ACAPS' survey with support from operational actors, 2020.

Wheat flour costs breakdown: comparison between 2017-2019 (YER/KG)

DETAILS	WORLD BANK April 2017	ACAPS DECEMBER 2019	CHANGE %
Cost of wheat grains per ton paid to exporter	73	123	69%
International shipping and insurance cost	14	21	50%
Cost of demurrage per day in Aden	-	27	100%*
Importer's silo mills cost	-	7	100%*
Local transportation cost	8	10	21%
Average cost to importer	95	188	98%
Importer margin	22	21	-3%
Milling cost	21	16	-24%
Importer sale price	138	225	63%
Agent/wholesaler margin	2	7	249%
Agent/wholesaler sale price	140	232	66%
Retailer margin	35	16	-54%
Retailer sale price wheat flour	175	248	42%

Source: World Bank, May 2018, and ACAPS' survey with support from operational actors, 2020.

*No value provided from the 2017 assessment, hence the 100% increase.

SECTION 5

Impact of global COVID-19 pandemic on food imports and prices

COVID-19 has not had a major impact on food supply chains in Yemen in terms of import flows, apart from short-term interruptions in Aden in April and May 2020. An increase in the price of vegetable oil, rice, and sugar was reported from May–August 2020 however, compared to the 12-month average.

The first confirmed case of COVID-19 was diagnosed in Ash Shihr, Hadramawt governorate, on 10 April 2020.58 Local authorities reported 2,405 confirmed COVID-19 cases, with 590 deaths and over 1,240 recoveries, as of 4 October.⁵⁹ The actual number of cases in Yemen is almost certainly much higher, as the authorities in Aden have struggled to count cases because of overlapping health crises. Ansar Allah has also been widely accused of covering up cases.⁶⁰

Following the announcement of the first confirmed case, the Yemen Gulf of Aden Ports Corporation announced that incoming vessels and crew must be held at anchorage for 14 days for quarantine.⁶¹ These measures were lifted in October 2020, however.

The impact of COVID-19 on Yemen's seaports has been primarily felt at Aden Port, which reported notable delays in April and May 2020, resulting in a reduction of food imports compared to the monthly average from October 2019–September 2020. The comparatively lower figures at Aden Port during these two months can be partly explained by the delays of two separate vessels – Kota Karim and TSS Shams – and COVID-19 concerns among Aden Port officials who were reluctant to board the two ships.⁶² The reduced eight-hour working days at the port for Ramadan, rather than rolling eight-hour shifts over a 24-hour cycle, might also explain the drop.⁶³ Imports in Aden increased above average in June and July, whereas they were marginally below average in August.

At the national level, food imports in March, April, and May – the early months of the COVID-19 pandemic – were below the monthly average compared to previous years, in large part because of the aforementioned issues in Aden. They rose to above average levels from June–August, reflecting improvements in the southern port city.

Although broadly similar amounts of food are being imported into Yemen following the COVID-19 pandemic, risks remain as major exporters might become unwilling or unable to sell essential foods. On 26 April, for example, Russia suspended wheat exports until July as it battled a growing outbreak of COVID-19,⁶⁴ and Ukraine may need to decrease wheat exports despite increased yields in 2020, depending on whether there are shortfalls in corn.⁶⁵ Together, these two countries accounted for 30% of the wheat imported into Yemen in 2016.

Likely the largest impact of COVID-19 on Yemen – and specifically Yemen's food supply chain – has been the decline in remittance flows from Yemeni expatriates working overseas, predominantly in Saudi Arabia. Although little precise data exists – given the extent to which remittance flows operate in informal networks – interviews with financial service providers/ hawalas indicate that from March 2020, remittance flows experienced a significant drop as COVID-19 shutdowns and the impact of low oil prices began to scar gulf economies. Remittances are one of the largest flows of foreign exchange into Yemen, which many importers depend on for financing. As mentioned in Section 2, access to hard currency continues to be one of the main challenges for Yemeni importers.

According to ACAPS' surveys carried out by operational actors in July–August 2020, the vast majority of importers, wholesalers, and retailers in southern governorates said that the spread of COVID-19 in port cities like Aden, Al Hodeidah, and Mukalla would lead to an increase in the price of commodities. They also said that their ability to secure foreign exchange funds has diminished since the COVID-19 pandemic emerged – most likely because of lower remittance flows.⁶⁶ The data appears to confirm their concerns. Commodity prices in Yemen have seen some increases: the price of vegetable oil increased by 40% from March–August 2020, while the prices of rice, salt, and sugar have fluctuated but were higher overall than the monthly average from September 2019–August 2020.

⁵⁸ Reuters, 'War-ravaged Yemen confirms first coronavirus case, braces for more', 9 April 2020.

⁵⁹ WHO, 'COVID-19 Dashboard Yemen'.

⁶⁰ This applied particularly to Ansar Allah-controlled territories and the Amanat Al Asimah governorate where the capital, Sana'a, is located. Ansar Allah authorities are accused of intentionally covering up the rate of infection across areas they control. AP News, 'Coronavirus spreads in Yemen with health system in shambles', 15 May 2020.

⁶¹ All About Shipping, 'Hot Port News from GAC', 11 April 2020.

⁶² Container vessel Kota Karim arrived at the anchorage point at Aden Port to 8 April 2020, where it remained for 21 days before proceeding to berth. Kota Karim then departed on 13 May, bringing the total time spent at Aden Port to 35 days. TSS Shams, another container vessel, arrived at the anchorage point at Aden Port to 23 April 2020 and proceeded to berth the following day where it remained until 11 May, bringing the total time spent at Aden Port to 18 days.

⁶³ ACAPS interview with Yemen maritime traffic observer on 20 May 2020.

⁶⁴ Bloomberg, 'World's Biggest Wheat Supply Dries Up When Some Want It Most', 26 April 2020.

⁶⁵ Corn accounts for half of domestic grain consumption in Ukraine; a below-average corn production might lead to decreased wheat exports to fill the gap of domestic grain demand. The extent to which corn production might affect wheat exports is not known, however. USDA, 'Ukraine Introduces Export Caps for Wheat and Rye', 1 September 2020.

⁶⁶ ACAPS surveys, July-August 2020.

Prices of the five main imported commodities: March-August 2020

	MARCH 2020	APRIL 2020	MAY 2020	JUNE 2020	JULY 2020	AUGUST 2020	MONTHLY AVERAGE SEP 2019-AUG 2020
Vegetable oil	523	-	699	699	752	737	545
Rice	925	-	987	987	950	950	829
Salt	175	-	150	150	175	175	157
Sugar	340	-	419	419	436	440	337
Wheat	275	-	275	275	287	300	293

Source: WFP VAM

Notes: prices are in YER per 1 KG or 1 litre (for vegetable oil)

There appear to be fewer new regulations concerning commodities arriving overland from abroad or trucked internally across the country after being unloaded at Yemeni seaports. In light of COVID-19, Ansar Allah authorities had previously enforced a 14-day quarantine period for trucks that had travelled from Aden and were destined for Sana'a, with the trucks and drivers placed in quarantine in Dhamar governorate.⁶⁷ These regulations, which were in place in late March and early April, were later scrapped after Ansar Allah authorities switched to temperature checks for drivers arriving from areas outside its control.⁶⁸ Quarantine measures remain in place for any goods arriving via either the Al Wadiah land border crossing in Hadramawt governorate on the Saudi-Yemeni border or the Shahen crossing in Al Mahrah on the Omani-Yemeni border. Health certificates have been waived on occasion, however, for food and medical imports at both locations.⁶⁹

METHODOLOGY

The material presented in this report is based on 20 key informant interviews conducted in May and September 2020, including with importers, distributors, and local economic experts who are knowledgeable about the country's food supply chain dynamics. ACAPS also obtained reliable import data from 2020 on food shipments that arrived via different seaports and land border crossings. ACAPS also relied on quantitative and qualitative questions included in a survey conducted with the support of operational actors, which was given to 218 supply chain actors (importers, wholesalers, agents, and retailers) in Abyan, Aden, Hadramout, Lahj, and Taiz from July–August 2020. We also carried out a thorough literature review using English and Arabic sources. In October 2020, a joint analysis workshop to validate ACAPS' findings and develop recommendations was held online among experts on Yemen's food supply chain mechanisms, economy, logistics, and humanitarian crisis, including from the UN, INGOs, and private consultants

RELIABILITY



LIMITATIONS

ACAPS has a moderate degree of confidence in the reliability of this report, despite primary data reliability being low. The broader limitations outlined below help in understanding why the conclusions drawn might be biased by information availability. ACAPS has balanced and cross-checked analysis based on primary data with experts who are working in Yemen and knowledgeable of the food supply chain, and therefore we are moderately confident in the final recommendations provided.

This report is based predominantly on key informant interviews and primary data collection conducted with the support of operational actors in Yemen. The survey could not be conducted in northern Ansar Allah-controlled territories because of access restrictions and risk of interference with the final data collection. The very nature of the topic is also subject to information gaps and lack of transparency. As detailed in the report, political interference in

⁶⁷ Interviews with a local food distributor on 17 April 2020. 68 Ibid.

⁶⁹ ACAPS interview on 20 May 2020.

the food import system is high and actors along the supply chain do not have incentives to be entirely open about their business, especially their profit margins. This is the case for private sector actors in any country, let alone a politicised context like Yemen.

A major limitation of the primary data collection is that it is based on self-reporting. ACAPS could not reach the respondents again for clarification after data was analysed. Survey results included comments by the people conducting the surveys on the low level of engagement by interviewees. Entire sections of the survey results have significant information gaps. For example, out of 13 Aden-based importers interviewed, only one answered the question about the price paid to the exporter for wheat grains.

Because some of the questions relating to prices referred to different time periods (from December 2019 to May 2020), ACAPS analysts applied different exchange rate values based on the month the answer referred to, which might not have been the exact value paid by the traders. The comparison of the price structure of imported wheat flour in Section 4 draws from ACAPS' survey results and the World Bank report published in 2018. While the data referring to December 2019 is based on self-reported retail prices in Taiz, the January 2015 and April 2017 value chains are likely based on national averages.

Efforts were made to provide the most up-to-date information; however on some occasions, a lack of new data made it difficult to determine how and whether regulations were still in place. ACAPS decided to include the most recent information available, although by the time of publication some information might have changed.

ACKNOWLEDGMENTS

The 'Yemen food supply chain' report is co-authored by ACAPS and Mercy Corps. All references to ACAPS research within the text should be understood as reflecting this collaboration.

This report is the result of the expertise shared by hundreds of food traders in Yemen and experts in Yemen and other countries, who have dedicated their time and insights to help us understand the functioning of Yemen's food supply chain and the complex context its main actors have to operate in. This report would not have been possible without the support of partners in Yemen to carry out primary data collection and without ACAPS consulting economists for their thorough analysis.

ACAPS wishes to publicly acknowledge the Cash Consortium of Yemen (CCY) for the knowledge shared and the feedback provided throughout the process. Many thanks are also directed to those who chose not to be named but have nonetheless contributed extensively to this product. Any mistakes or errors are entirely ACAPS' own.