

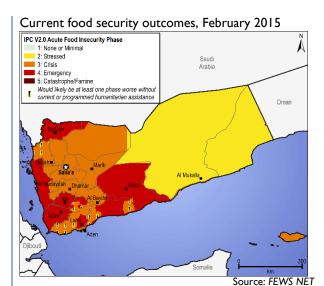
YEMEN Food Security Outlook

February to September 2016

Conflict-related disruptions to markets and livelihoods drive major assistance needs

KEY MESSAGES

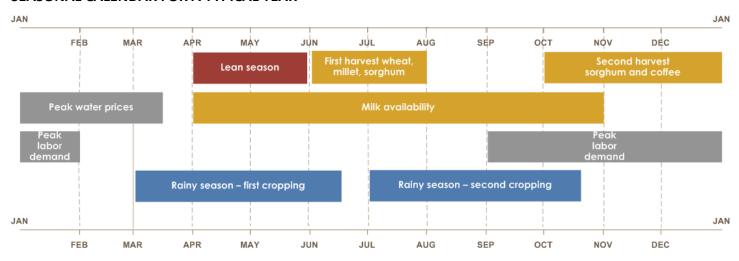
- Market disruptions and limited household purchasing power due to below-average incomes are severely limiting food access for many poor households in conflict-affected areas of Yemen. In the absence of improved access, food consumption gaps and the severe depletion of livelihood assets are expected to continue, in line with Crisis (IPC Phase 3) or Emergency (IPC Phase 4) between February and September 2016, depending on the area. Displaced populations are likely facing the worst food security outcomes.
- Yemen imports approximately 90 percent of the wheat required to meet its local consumption needs. Although improved import levels have caused wheat flour prices to decline compared to several months ago, the average price of wheat flour increased slightly in February 2016 compared to the previous month (5 percent) and was 7 percent above pre-conflict February 2015 levels. Given the expected effects of the ongoing depreciation of the USD/YER exchange rate, food prices will likely rise in the coming months.



This map represents acute food insecurity outcomes relevant for emergency decision-making. It does not necessarily reflect chronic food insecurity. To learn more about this scale, click here.

• Conflict in Ta'izz is continuing to hamper the delivery of adequate humanitarian and commercial supplies to populations in need. As a result, February food and fuel prices in Al Ma'afer market in Ta'izz were the highest observed across all monitored markets. Although food security outcome data for Ta'izz remains limited, livelihood disruptions and poor household purchasing power are expected to maintain many poor households in Emergency (IPC Phase 4) food insecurity through at least September 2016.

SEASONAL CALENDAR FOR A TYPICAL YEAR



Source: FEWS NET



NATIONAL OVERVIEW

Current Situation

CONFLICT

As of March 2016, intense fighting and airstrikes continued in various parts of the country including Ta'izz, Ibb, Al Bayda, Ma'rib, Al Jawf, Sana'a, Sa'dah and the lowlands of Hajjah. Sporadic clashes were also observed in other districts, such as Ad Dali', Lahij and Shabwah. Fighting in Ta'izz remains the most intense, especially in the districts of Ta'izz City (Salah, Al Qahirah and Al Mudhafar) where a siege prevented humanitarian and commercial supplies (ex. medication, fuel and food) over the past several months, except for during a weeklong period in March when access temporary improved. Meanwhile, Sa'dah has been worse affected by airstrikes though these strikes declined significantly since the second week of March.

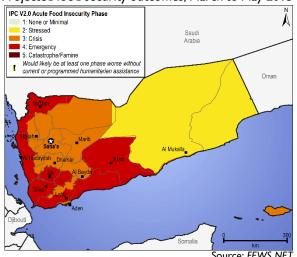
DISPLACEMENT

According to the <u>Task Force Population Movement (TFPM) updates</u>, 2.4 million IDPs were identified in January 2016, which is slightly below the 2.5 million IDPs identified in December. Due to an improved political situation, the number of people returning to their homes increased in the southern governorates, especially in Aden (300,000 people), Lahij (63,000 people), Shabwah (20,000 people), Ad Dali' (16,000 people) and Abyan (9,000 people). Meanwhile, IDP populations increased compared to December 2015 levels in other areas, including Ta'izz (162,000 people), Hajjah (142,000 people), Sa'dah (64,000 people) and Sana'a (62,000 people). The governorates with the highest number of IDPs were Ta'izz (555,048), Hajjah (353,219), Sana'a (253,000), Amran (245,689) and Sa'dah (237,978). According to the February TFPM Report Infographic dashboard, 42 percent of IDPs were residing in rented houses, 19 percent in schools, 15 percent in public areas, and 10 percent in temporary tents or structures.

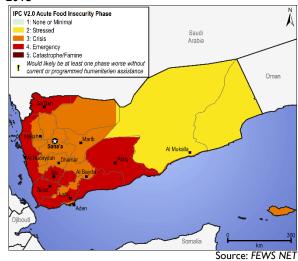
IMPORTS

With an exception to Al Mokha port in Ta'izz Governorate, which has been closed since August, other ports (Aden, Al Hudaydah and Al Saleef in Al Hudaydah Governorate, and Al Mukalla in Hadramaut Governorate) were

Projected food security outcomes, March to May 2015



Projected food security outcomes, June to September 2015



This map represents acute food insecurity outcomes relevant for emergency decision-making. It does not necessarily reflect chronic food insecurity. To learn more about this scale, click here.

open and functioning as of February. Based on data from FleetMon (Figure 1) and the <u>UNOCHA February 2016 Snapshot on Shipping</u>, <u>Food and Fuel Imports</u>, the number of ships arriving in Yemen had been steadily increasing over the past several months until a decline in February 2016. In parallel, monthly food importations were estimated to be 458 MT in February, which represents a 24 percent decline compared to January 2016 levels but a 99 percent increase compared to a low of 230 MT in September. Fuel imports in February met roughly 15 percent of monthly fuel needs, which compares to 85 percent of needs in January. Amongst the four cross-border control facilities with Saudi Arabia, only Al Wade'ah-Al Abr has continued to be open throughout the conflict.

INTERNAL TRADE

As of March 7, 2016, the number of roads classified as "closed" or "difficult to access" according to <u>WFP's Logistics Cluster Access Constraints Map</u> had increased compared to January 19's levels, particularly in the northern governorates due to ongoing fighting, damaged bridges, and security clearance requirements. However, alternative off-road or secondary routes are available in most cases. Additionally, FEWS NET surveyed traders as part of a rapid food security assessment in western Yemen in January 2016¹ and trader perceptions of activity levels along key transport routes are shown in Figure 2.

¹ In January and February 2016, FEWS NET conducted food security research in ten governorates in Yemen: Abyan, Ad Dali, Aden, Al Bayda, Al Hudaydah, Al Mahwit, Ibb, Lahij, Sa'dah and Ta'izz. In each governorate, research conducted included non-representative household surveys on food security and access; market conditions; and the status of remittances, water access, agricultural production, healthcare and humanitarian assistance. Research on port conditions was also conducted for coastal governorates.

EXCHANGE RATES

Although the official Central Bank of Yemen (CBY) exchange rate remains stable, parallel market exchange rates collected by FEWS NET in Sana'a City indicate that the exchange rate has depreciated to 269.8 YER/USD in March 2016, which compares to 230 YER/USD a year ago (Figure 3). Pressure on the value of the Yemeni rial is escalating due to a halt of Yemen's oil exportations, a key source of foreign exchange that makes up about 70 to 75 percent of national revenue.

COMMODITY AVAILABILITY

Improvements in import levels during recent months have generally had positive impacts on food and fuel availability on local markets compared to the March to August 2015 period. An exception, however, is Ta'izz where security conditions and a siege on the city continues to limit trade flows. In general, the availability of fuel on local markets is less than for food due to current restrictions on fuel imports.

WHEAT FLOUR PRICES2:

Yemen imports approximately 90 percent it wheat consumption requirements, which makes wheat flour prices and household purchasing power important drivers of food insecurity in Yemen. Although wheat flour prices have generally declined compared to several months ago due to improved import levels, the average price in February 2016 increased slightly compared to the previous month (5 percent) and was still 7 percent above pre-conflict February 2015 levels. These price increases were likely due to 1) the depreciation of Yemeni rial on parallel markets, and 2) rumors in late February that bank authorities would stop supporting better exchange rates for food importers, particularly relating to sugar and rice. These rumors resulted in increased demand for wheat flour by traders who were concerned about potential import issues in the coming months.

The largest increases in wheat flour prices between January and February 2016 were observed in the Sana'a City (12 percent), Al Jawf (10 percent), Sa'dah (9 percent), Socotra, (8 percent), Hajjah (7 percent) and Shabwah (6 percent). Additionally, the highest wheat flour prices amongst all monitored markets were observed at Al Ma'afer market in Ta'izz, where February prices were 233 YER/kg, or 59 percent above the national average.

Figure 1. Number of bulk carrier arrivals per month, by port (Includes multiple arrivals for some vessels)

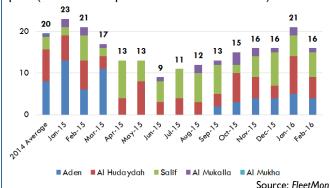
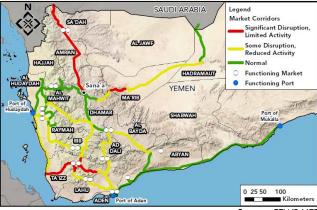
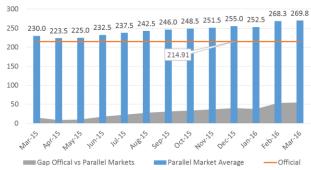


Figure 2. Trader perceptions of key transport routes (January 2016)



Source: FEWS NET

Figure 3. Official exchange rate and exchange rate on parallel markets in Sana'a City



Source: FEWS NET and Central Bank of Yemen

FUEL PRICES

Diesel prices were either stable or declined between January and February 2016 on all monitored markets, except for in Sa'ada where prices increased by nine percent. Amongst monitored markets were historical price data is available for the pre-conflict period (Aden, Al Hudaydah, Amran, Hajjah, Sa'dah and Sana'a), diesel prices increased by between 21 and 100 percent compared to February 2015 levels, except for in Aden where prices were similar to pre-conflict levels (+0 percent). Gasoline and cooking oil prices followed similar trends and declined between January and February 2016 at most markets. Similar to wheat flour, the highest fuel prices were observed at Al Ma'afer market in Ta'izz.

² The national average is based on data from six markets where price data is available prior to February 2015 when conflict escalated: Aden, Al Hudaydah, Amran, Hajjah, Sa'dah and Sana'a.

INCOME SOURCES

In line with discussions with NGO partners and the results of 2015 SMART survey data, FEWS NET's January 2016 rapid assessment found that the majority of respondents in all governorates surveyed indicated a decline in overall income levels in 2015 compared to 2014, except for in Abyan and Lahij where respondents reported no change. Additionally, respondents reported that a higher proportion of their income came from humanitarian assistance, gifts, and borrowing in 2015 compared to the previous year.

In rural areas over recent years, cash crops sales have increasingly been focused on qat production due to this crop's shorter growth cycle, which allows for cultivation throughout the year. As a result, qat production represents one of the most important income sources for rural households in Yemen. This continued to be the case even this year, despite the conflict, as demand for qat remains strong. Qat farms are mainly located in highland areas and are usually owned by better-off households, although labor work opportunities are usually available for the poor in the surrounding areas.

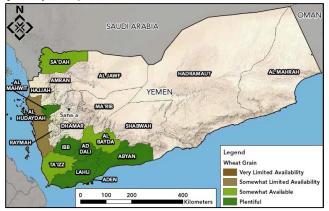
FEWS NET's January 2016 rapid assessment found numerous issues affecting the banking and remittance sectors in surveyed governorates, including branch closures due to proximity to ongoing fighting, cash shortages, and the complete halt of international wires in USD. In urban areas, remittance services were mostly functional, with the exception of Abyan and Aden where they were sometimes limited by security considerations; and in urban Lahij, where there was no functioning remittance office. In rural areas of Lahij and Al Hudaydah, however, remittance services were still fully functional and in rural Ta'izz, they were functional to a limited degree. In remaining surveyed governorates, rural residents reported traveling to the closest city or urban setting to receive remittances, which is more costly this year due to insecurity and high fuel prices.

FEWS NET's January 2016 rapid assessment also found that public sector salaries and pensions continued to be paid in full (minus any bonuses or allowances) in all surveyed governorates except Aden, where only one post office location was disburses salaries. As a result, employees from throughout Aden were waiting in line for up to several days, and the office frequently runs out of cash. Social security payments were being disbursed in Al Hudaydah, Ibb, Lahij, and Sa'dah.

FOOD SOURCES

According to FEWS NET's January rapid assessment, market purchases using cash or credit continue to be import food sources for surveyed households, although the proportion of total food coming from cash purchases has declined since 2014. Meanwhile, humanitarian assistance and assistance from family, friends, and

Figure 4. Trader perceptions of wheat grain availability (January 2016)



Source: FEWS NET

Figure 5. Wheat flour prices compared to the February 2015 national average

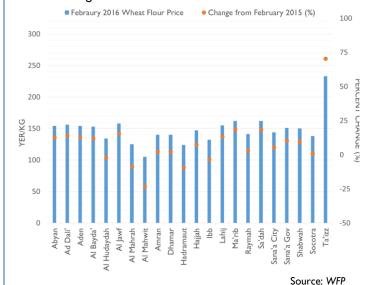
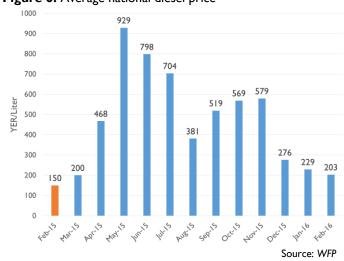


Figure 6. Average national diesel price



neighbors have emerged as more important food sources over the past year for surveyed households in some governorates.

NUTRITION

Though there have been many challenges in implementing national food security and nutrition surveys since the conflict started in March 2015, SMART surveys were conducted between August and October 2015 by the Ministry of Public Health and Population (MoPHP) and UNICEF in Aden, Al-Hodeidah, Hajjah, Lahji, and Al-Bayda. The results of these surveys indicate that although the prevalences of global acute malnutrition (GAM) amongst children 6-59 months of age, measured by a weight-for-height z-score <-2 and/or the presence of edema, were similar to previous years' levels, they still exceeded the WHO's critical threshold (>15 percent) in Aden (19.2 percent), Al-Hodeidah (31.0 percent in lowland areas), Hajjah (20.9 percent in lowland areas), and Lahji (20.5 percent in lowland areas).

During FEWS NET's January 2016 rapid assessment, all interviewed key informants from malnutrition units of hospitals and health centers expressed concern that malnutrition is on the rise compared to the pre-conflict period.

Figure 7. Average change in income by governorate

| Governorate | Average change in income 2015 vs. 2014 |
|-------------|--|
| Abyan | ←→ No change |
| Ad Dali | ↓ 20 – 50% |
| Aden | ♦ ≥ 50% |
| Al Bayda | 4 20-50% |
| Al Hudaydah | ↓ to 0 |
| Al Mahwit | ↓ to 0 |
| Ibb | ♦ ≥ 50% |
| Lahij | ←→ No change |
| Sa'dah | ♦ ≥ 50% |
| Ta'izz | ♦ ≥ 50% |

Source: FEWS NET

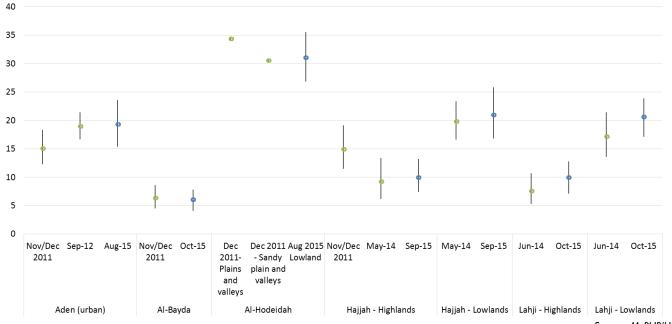
However, interviewees noted that in some cases, recorded numbers of cases admitted may not reflect this trend because some centers have had to turn patients away due lack of supplies. This is the case at Khalifa Hospital in Al Turba, Ta'izz, for example, where the hospital had run out of beds and therefore could only offer outpatient treatment for moderate acute malnutrition.

FOOD ASSISTANCE

The conflict has impeded the delivery of humanitarian assistance in many areas of the country due to checkpoints and mounting bureaucratic demands. According to <u>UNOCHA Humanitarian Bulletin</u>, 75 percent of districts had relatively low access constraints as of March 1, with the remaining districts facing worse constraints (Figure 9).

On average between November and January, WFP provided 28,753 MT on food assistance to 2.16 million people per month across the country. However, in February 2016, WFP declared that it would be reducing ration sizes to 75 percent of full entitlements during the first three months of 2016 due to pipeline shortfalls.

Figure 8. Global acute malnutrition (GAM) prevalences for children between 6 and 59 months of age, based on weight-for-height z-scores, with a 95 percent confidence interval from 2015 SMART surveys compared to historical GAM prevalences



Source: MoPHP/UNICEF

WFP'S MVAM SURVEYS³

Since August 2015, WFP has been collecting food consumption score (FCS) and reduced coping strategies index (rCSI) data through cell phone-based surveys in Yemen. Based on February 2016 data, more than 20 percent of the population in all governorates had "poor" food consumption, except for in Abyan, Aden, Al Hudaydah, Al Maharah, Al Mahwit, Hadramaut, and Sa'dah. Additionally, Al Maharah was the only governorate across the country where at least 80 percent of the population reported "acceptable" food consumption. Generally, over the past several months, the percentage of the population reporting "poor" food consumption has been relatively stable, with the exception of Aden, Amran, and Marib where a general decline in the percentage of respondents reporting "poor" food consumption was observed. Figure 10 shows the proportion of households with "poor" food consumption, on average between December 2015 and February 2016, compared to food consumption scores collected prior to the start of conflict in 2014.

Reduced coping strategies index (rCSI) data from the same surveys suggest a slight increase in February compared to January's levels across many governorates although general trends have been relatively stable over past months for this indicator. Notably, the median rCSI exceeded 20 in three governorates (Al Jawf, Hajjah, and Raymah). Figure 11 shows the median rCSI, on average between December 2015 and February 2016, compared to rCSI collected prior to the start of conflict in 2014. As this graphic shows, the majority of governorates saw significant increases in rCSI compared to pre-conflict levels.

Additionally, according to <u>WFP's February mVAM report</u>, IDP households, on average, reported significantly poorer food consumption and higher levels of coping in comparison to non-displaced households (Figures 12 and 13).

Assumptions

The most likely scenario for the February to September 2016 period is based on the following national level assumptions:

• For the purpose of this scenario, FEWS NET will assume that on the ground fighting and airstrikes will continue into the coming months at levels that are similar to current levels. The geographic distribution of conflict will also remain similar to the current situation with intense fighting and airstrikes in various parts of the country including Ta'izz, Ibb, Al Bayda, Ma'rib, Al Jawf, Sana'a, Sa'dah, and the lowlands of Hajjah. In the south, sporadic clashes will continue with armed groups such as Al-Qaeda in the Arabian Peninsula (AQAP) and the Islamic State of

Figure 9. Humanitarian access restrictions

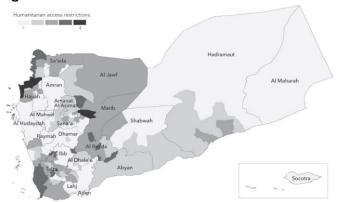


Figure 10. Percentage of households with "poor" food consumption between Dec 2015 and Feb 2016 compared to 2014 CFSS results

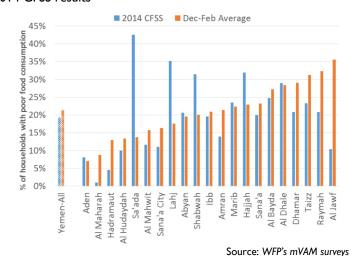
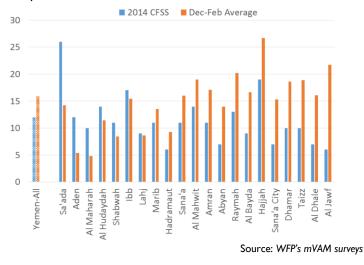


Figure 11. Median rCSI between Dec 2015 and Feb 2016 compared to 2014 CFSS results



³ Please note that cell phone based surveys are likely biased towards better-off and urban populations who have access to cell phones. These biases should be kept in mind when comparing these survey results with in-person representative household surveys conducted prior to the conflict.

Iraq and the Levant (ISIL). Conflict will continue to drive additional population displacements, livelihood disruptions, and poor market functioning in affected areas.

- Oil production and exports will not resume during the scenario period given the continuation of on the ground fighting and airstrikes in the western parts of the country, as well as insecurity associated with AQAP and ISIL operations in Shabwah and Hadramout.
- The USD/YER exchange rate, particularly on parallel markets, will likely depreciate during the outlook period due to reduced foreign reserves caused by the halt in oil exportations, the suspension of funds to the government from other countries, and the generally poor economic environment within the country at this time.
- Importations of food and fuel, as well as overall food availability, will remain relatively similar to current levels, although with high fluctuations from one month to another. Import of fuel will continue to be less than for food due to fuel import restrictions.
- Market demand will be atypically low as below-average incomes reduce household purchasing power.
- The price of imported wheat flour and fuel will increase

Remittances will continue at levels that are similar to the current situation.

• Livestock sales will be below average due to the halt of exportation, trade route disruptions, reduced demand from local households, and a reduction in animal vaccination campaigns.

during the scenario period to levels that are similar to those observed in 2015 due to the effects of the depreciating Yemen rial.

• The availability of agricultural labor opportunities will be atypically low, which will reduce incomes from this source to atypically low levels for many rural agricultural households. Although qat production will continue to be relatively average and certain large farmers, especially those producing fruit and vegetables in Sa'dah and parts of Tihamah basin, have started using solar panel systems to run their irrigation systems given diesel shortages, most farmers will not have the financial resources to switch to these technologies. As a result, labor opportunities and wages will be reduced.

Most Likely Food Security Outcomes

Although an increased number of household will be market dependent during the scenario period due to the lean season (April to June in many areas), household purchasing power will continue to deteriorate due to atypically high food prices and livelihood disruptions. While many households will attempt to cope by selling assets and reducing the quantity and diversity of meals, these efforts are not expected to enable households to meet basic food needs As a result, food consumption gaps to varying degrees are expected during the scenario period. More specifically, Emergency (IPC Phase 4) outcomes are expected in Abyan, Ad Dali, Al Hodaydah, parts of Hajjah, Ibb, parts of Lahij, Sa'dah, Shabwah, and Ta'izz. Meanwhile, Crisis (IPC Phase 3) outcomes are likely in Aden, Al Bayda', Al Jawf, Al Mahwit, Amanat Al Asimah, Amran, Dhamar, coastal areas of Hadramaut, parts of Hajjah and Lahij, Ma'rib, and Sana'a. In eastern parts of the country, including Hadramaut and Al Mahrah governorates, household livelihoods have been less disrupted by conflict compared to other areas and are expected to remain in Stressed (IPC Phase 2) food insecurity. Displaced populations are likely facing the worst food security outcomes.

Figure 12. Mean food consumption scores for Yemen amongst displaced and non-displaced populations

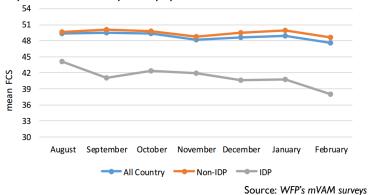
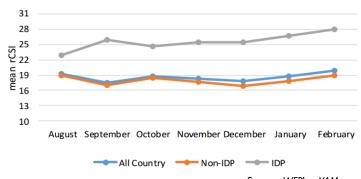


Figure 13. Mean reduced coping strategies index for Yemen amongst displaced and non-displaced populations



Source: WFP's mVAM surveys

AREAS OF CONCERN

Sa'dah livelihood Zone YE 09 "Irrigated Wheat, Fruit, Vegetables, Qat and Livestock Zone"

This agricultural livelihood zone covers most of Sa'dah Governorate and extends into the northern fringes of Amran Governorate. The zone's economy is driven by the production of cash crops, specifically fruits (ex. apples, pomegranates and citrus) and qat. The sale of cash crops accounted for the majority of better-off households' annual income, which is also supplemented by livestock sales and trade activities. The poor mostly rely on farm labor activities, being paid in cash or in kind. They also herd other households' animals, seek casual labor activities outside the zone, and rely partially on remittances. As cereal production is very little compared to other highlands zones, market purchases is the main source of food for poor households.

Current Situation

CONFLICT

During 2015, Sa'dah experienced some of the greatest infrastructure damage and civil insecurity compared to other governorates due to continual airstrikes. Although there was a reduction in the number of airstrikes in December and January, they intensified again in February, although at a lower level compared to November 2015 levels. More recently, strikes since the second week of March have been significantly scaled down, though there is still a significant amount of physical damage to key infrastructure, including routes, health facilities, and markets, caused by earlier strikes.

Figure 14. Availability/Supply of key commodities in Sa'dah during recent months

| | Wheat | | Veg. | Red | | Cooking | | |
|-------------------|-------|-------|------|-------|--------|---------|--------|--------|
| | Flour | Sugar | Oil | Beans | Onions | gas | Petrol | Diesel |
| Jun Wk I | S | S | S | Α | S | S | N | S |
| Jun Wk 2 | Α | Α | S | N | Α | S | S | S |
| Jun - Wks 3 and 4 | Α | Α | S | N | Α | S | S | S |
| Jul - Wk I | Α | Α | S | Α | Α | S | S | S |
| Jul - Wk 2 | Α | Α | S | S | Α | S | S | S |
| Aug – Wks I and 2 | Α | Α | S | Α | Α | S | S | S |
| Aug – Wks 3 and 4 | S | S | S | S | Α | S | S | S |
| Sep - All Wks | S | S | S | S | S | S | S | S |
| Oct – Wks I and 2 | S | S | S | S | S | S | S | S |
| Oct – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Nov – Wks I and 2 | S | S | S | S | S | S | S | S |
| Nov – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Dec – Wks I and 2 | S | S | S | Α | Α | S | S | S |
| Dec – Wks 3 and 4 | S | S | S | Α | Α | S | S | S |
| Jan- All Wks | S | S | S | S | Α | S | S | S |
| Feb - All Wks | S | S | S | S | Α | S | S | S |

| N | Not Available |
|---|------------------------|
| S | Sporadically Available |
| Α | Generally Available |
| | |

Source: WFP

POPULATION DISPLACEMENTS

The latest <u>Task Force Population Movement</u> estimates indicate that Sa'dah had approximately 237,978 IDPs as of the end of January, which represents the highest IDPs to host community ratio in the country, at 33 percent. Additionally, conflict over the past year has led to an overall reduction in the governorate's population from approximately 1,044,000 people prior to the conflict to 719,000 people now, or a decline of 31 percent. Within this context, movements of IDPs to Sa'dah City have increased during the December to February period due to improved security conditions, trading opportunities, and better health and medical services compared to other districts. The majority of IDPs in the Sa'dah City, as well as other districts in the zone, have settled in rented houses or with relatives, and have access to humanitarian assistance.

ROAD SECURITY

Trade is an important livelihood activity within Sa'dah, with fruits and livestock typically exported towards Saudi Arabia and Sana'a and inflows of imported food items (ex. wheat flour) into the zone. A FEWS NET rapid assessment in January/February found that the A'lb – Baqem – Sa'dah marketing route had no activity due to severe damage from airstrikes. The Sana'a – Khamir – Sa'dah route also has damaged bridges, although traders are hiring escorts, buying illicit fuel from the black market, and then taking side roads to get through on this route. As a result, transportation costs increased by 200 percent during the past year. Meanwhile, the Amran-Harf Sufyan- Al – Wade'ah Passage – Sa'dah route is open, despite delays due to checkpoints, although transportation costs are reportedly up 300 percent compared to February 2015 levels. Cross-border points at Baqem and Al Buga' are closed, resulting in no trade between Sa'dah and Saudi Arabia at this time. These disruptions are reducing income for households typically involved in trade activities.

AVAILABILITY OF STAPLE FOODS AND FUELS ON LOCAL MARKETS

According to WFP's market updates, most staple foods (wheat, sugar, vegetable oil, red beans) and fuels (cooking gas, petrol and diesel) have been only sporadically available on markets since at least mid-August. This is in line with information from FEW NET

market monitoring suggesting that the availability of fuel is "somewhat limited" while wheat grain, wheat flour and rice is "somewhat available". Additionally, FEWS NET's January 2016 rapid assessment estimated that wheat grain and flour quantities available in Souq Othman Market, the main market in Sa'dah City, were only slightly higher in January compared November while rice stocks had not changed.

WHEAT FLOUR PRICES

Similar to national trends, wheat flour prices increased slightly (+ 9 percent) between January and February 2016 to 162 YER/kg. While lower than price levels observed during recent months due to improved security and increased imports, prices remained 12 percent above last year's pre-conflict levels and 17 percent above the five-year average. Given below-average household incomes, households are having difficulty affording wheat flour on local markets at current price levels.

FUEL PRICES

Petrol prices have fluctuated significantly over the past year, with prices peaking at 950 YER/liter in May 2015 at Sa'ada market and then declining during more recent months as fuel availability has improved. As of February 2016, the price of petrol was 328 YER/liter, which was down 65 percent compared to peak May prices but still up 119 percent compared to the same time last year. Diesel prices have followed similar trends and currently remain twice pre-conflict levels.

High petrol prices have increased the prices of transportation and is contributing to higher prices on local markets. Additionally, as diesel is frequently use to power irrigation systems in the governorate, the increase in diesel prices has negatively impacted agricultural activities, and in turn the availability of agricultural labor opportunities.

INCOMES

In Sa'dah, agricultural labor work, qat sales, petty trade, cross-border trade with Saudi Arabia, and public salaries are important income sources for local households. When conflict erupted in March 2015, it significantly affected the nature of income-generating activities as labor opportunities relating to agriculture, markets, and construction declined, and the border closure with Saudi Arabia halted formal and informal cross-border trade.

FEWS NET's January 2016 rapid food security assessment found that incomes declined by more than 50 percent in Sa'dah amongst surveyed households with respondents

Figure 15. Wheat flour prices in Sa'ada (YER/KG)

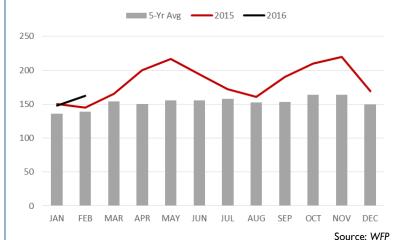
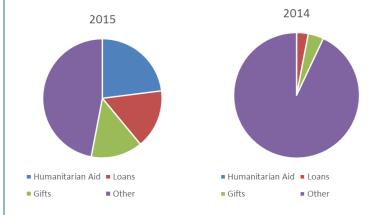


Figure 16. Diesel prices in Sa'ada (YER/LITER)



Figure 17. Household income sources in 2015 compared to 2014 in Sa'dah based on respondents interviewed during FEWS NET rapid assessment in January 2016



Source: FEWS NET

reporting that humanitarian assistance, loans and gifts were becoming increasingly important income sources in 2015 in comparison to 2014. Meanwhile, other sources of income, such as labor, agricultural activities and livestock sales, became a less important source of income during the same period due to road disruptions, high fuel prices, and halted cross-border trade.

FOOD SOURCES

Sa'dah is not a major cereal production area of Yemen, with local cereal production in Sa'dah only making up approximately two percent of the total national cereal production. With such limited production, households in the zone are generally market dependent for many months of the year. However, given the severe decline in income levels this year, household food purchases on local markets is in decline, and households are becoming increasingly dependent on gifts, loans, assistance from family and friends, as well as humanitarian assistance. Additionally, households interviewed during FEWS NET's January rapid assessment reported that given limited food and income, they were forgoing protein-rich foods (meat, chicken, beans), followed by fruits, vegetables, and dairy.

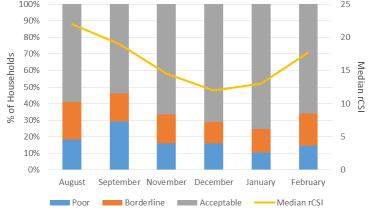
HUMANITARIAN ASSISTANCE

In January, WFP distributed 1,835 MT of food items to around 178,000 individuals, which accounts for about 64 percent of the total assistance provided in the governorate. These figures are less than December's levels (228,300 individuals), but higher than in November (84,200 individuals).

WFP'S MVAM SURVEYS

Since August 2015, WFP has been collecting food consumption score (FCS) and reduced coping strategies index (rCSI) data through cell phone-based surveys in Sa'dah. Based on February 2016 data, 15 percent of surveyed households reported having poor food consumption and an additional 19 percent reported borderline food consumption. The proportion of the population with poor food consumption increased slightly compared to January 2016 levels but was down compared to August and September levels. Similarly, median rCSI amongst surveyed households in February was 18, which was up compared to December and January levels but down slightly compared to August and September levels. Both median rCSI and the percentage of the population with poor food consumption was down, however, compared to the results of the 2014 CFSS, where 43

Figure 18. Food consumption scores and rCSI from WFP mVAM surveys in Sa'dah 100% 25 90% 80% 20



Source: WFP

percent of respondents had poor food consumption and the median rCSI was 264.

Assumptions

The most likely scenario for the February to September 2016 period is based on the following zone-level assumptions:

Total household incomes will be below average during the scenario period. More specifically, household incomes from sources included non-agricultural and agricultural labor and livestock sales will be significantly below average. While reliance on remittances, gifts and humanitarian assistance will increase to above-average levels, these sources will not fully offset the decline in incomes from other sources. Market purchases will also be atypically low due to the resulting poor household purchasing power.

Most Likely Food Security Outcomes

As the conflict continues to limit household food and income sources, poor households in the zone will attempt to meet food consumption requirements through negative and unsustainable coping, including the sale of assets (livestock, jewelry, furniture), begging, reducing diet diversity, and cutting non-food expenditures (medical care, clothing, schooling, and transportation). However, even with these efforts, households are still expected to face food consumption gaps, in line with Emergency (IPC Phase 4) acute food insecurity, with an increased risk for very high acute malnutrition and excess mortality.

⁴ Please note that cell phone based surveys are likely biased towards better-off and urban populations who have access to cell phones. These biases should be kept in mind when comparing these survey results with in-person representative household surveys conducted prior to the conflict.

TA'IZZ: Livelihood Zone YE 10 "Highland qat, grain, fodder, and livestock"

In this livelihood zone, qat production is a major income source throughout the year. As in other highland zones, livestock production also plays an integral part in household livelihoods. Poor households in the zone mostly rely on labor provided by better-off neighbors and supplement this income with livestock sales and credit. While the poor do produce cereals on their small landholdings, this cereal production does not generally cover consumption needs, making them heavily dependent on market purchases for food.

Current situation

CONFLICT

Across the country, fighting in Ta'izz remains the most intense, especially in the districts of Ta'izz City, including Salah, Al Qahirah and Al Mudhafar. In these districts, a siege has prevented the arrival of humanitarian and commercial supplies (ex. medication, fuel and food), except for a short weeklong period in March 2016. In rural areas of livelihood zone 10, fighting has been observed in the districts of Shara'ab Ar Rawnah, Al Ta'izziah, and Jabal Habashi.

POPULATION DISPLACEMENTS

According to the most recent TFPM report, Ta'izz governorate hosts the largest number of IDPs in Yemen. Within livelihood zone 10, there are around 169,400 IDPs, which account for about 30 percent of total IDPs in Ta'izz governorate. According to partners, priority needs for these IDPs include shelter, basic food items, water, sanitation, and health facilities.

TRADE ROUTES

All main trade routes to Ta'izz Governorate were reportedly closed for around eight months except for the Lahij-Tor Al Baha route, which according to WFP's Access Constraint Maps, is open but linked with a road with "difficult access" between Aden and Lahij. FEWS NET's January rapid food security assessment found that transportation costs along this route were up by 150 percent in recent months with many traders reporting that they were using unpaved side roads not passable by large trucks due to security risks and to avoid fees imposed by armed groups along the main route. The closure of Al Mukha Port and the route to Al Hudaydah port (historically the main ports serving Ta'izz) have significantly affected fuel and food availability in the governorate. The port in Aden is currently the only source of supplies for the area, with goods coming in along the Lahij-Tor Al Baha route and passing through Al Ma'afer market.

AVAILABILITY OF STAPLE FOODS AND FUELS ON LOCAL MARKETS

The availability of fuel and food commodities in Ta'izz, according to WFP, has been sporadically available during recent months. This is in line with the results of FEWS NET's January rapid assessment, which found that traders reported that wheat grain, wheat flour, gasoline, diesel, and cooking gas were "somewhat available". Notably, when importations increased at a national level during recent months, food availability did not improved in Ta'izz due to the conflict, restricted access, and a siege on Ta'izz City. Meanwhile, market demand has recently increased due to 1) a rising number of IDPs in the zone, and 2) the seasonally normal

Figure 19. Availability/Supply of key commodities in Ta'izz during recent months

| | Wheat Flour | Sugar | Veg. Oil | Red Beans | Onions | Cooking gas | Petrol | Diesel |
|-------------------|----------------|-------|-------------|--------------|--------|----------------|--------|--------|
| Jun Wk I | S | A | S | S | Α | S | N | N |
| Jun Wk 2 | Α | Α | Α | Α | Α | S | S | S |
| Jun - Wks 3 and 4 | Α | Α | Α | Α | Α | N | S | S |
| Jul - Wk I | Α | Α | Α | Α | Α | S | S | S |
| Jul - Wk 2 | Α | S | Α | S | S | S | S | S |
| Aug – Wks I and 2 | Α | Α | Α | Α | Α | S | S | S |
| Aug – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Sep - All Wks | S | S | S | S | S | S | S | S |
| Oct – Wks I and 2 | S | S | S | S | N | N | S | S |
| Oct – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Nov – Wks I and 2 | S | S | S | S | S | S | S | S |
| Nov – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Dec – Wks I and 2 | S | S | S | S | S | S | S | S |
| Dec – Wks 3 and 4 | S | S | S | S | S | S | S | S |
| Jan- All Wks | S | S | S | S | S | S | S | S |
| Feh - All Wks | S | S | S | Α | S | S | S | S |

| Z | Not Available | | |
|---|------------------------|--|--|
| S | Sporadically Available | | |
| | Generally Available | | |

Source: WFP

depletion of household cereal stocks from the September to November harvests.

WHEAT FLOUR PRICES

Although prices have fallen sharply compared to November 2015's levels at Al Ma'afer market in Ta'izz, wheat flour prices still remain above price at all other monitored markets in Yemen with February prices at 233 YER/kg, or 59 percent above the national average.

These high prices, along with stretched resources as local communities host a large number of IDPs, has negatively affected purchasing power in the zone.

FUEL PRICES

Petrol prices at Al Ma'afer market continued to decline (-18 percent) between January and February 2016, through prices remain the highest in the country and 78 percent above the national average. FEWS NET rapid food security assessment in January found that there is no longer any official sales of petrol in Ta'izz Governorate and all gas stations are closed. This, along with route disruptions, are contributing to high transportation costs in the zone.

Yemen's highest black market diesel and cooking oil prices in February 2016 were also observed at Al Ma'afer market. In addition to increasing transportation costs, the sharp increase in diesel prices has increased input costs for qat production in Ta'izz.

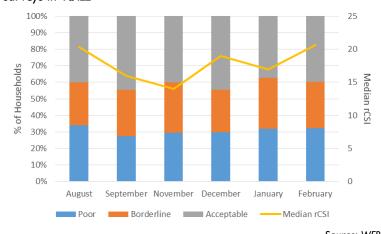
INCOMES

The impacts of conflict on market networks and fuel prices have significantly affected various income sources for poor households, including agricultural and non-agricultural labor, livestock sales, and social support. Labor migration and remittances typically represent a significant source of income for households but currently, remittance service have been limited due to the proximity of ongoing fighting, which has exposed beneficiaries to additional costs to travel to the nearest safe town or finding traders who can provide the service with a deduction of the received amount. Public sector salaries are reportedly normal but with a deduction of bonuses and per diems, similar to other governorates, since the beginning of 2015. While households interviewed by FEWS NET during FEWS NET's

Figure 20. Wheat flour prices in Al Ma'afer compared to the national average (YER/kg)



Figure 21. Food consumption scores and rCSI from WFP mVAM surveys in Ta'izz



recent January rapid assessment reported that a higher proportion of their incomes were coming from humanitarian assistance this year, this assistance was not offsetting the decline in income levels from other sources and as a result, overall household incomes were down by over 50 percent in 2015 compared to 2014. Impacts of conflict on livestock markets have also been significant due to the halted exportation of animals to Saudi Arabia, increased transportation costs, and route disruptions to the city and other governorates. The bartering of animals for staple foods, particularly wheat, have also increased.

FOOD SOURCES

In comparison with 2014, households interviewed by FEWS NET in January 2016 reported that the proportion of their total food coming from market purchases had declined, likely due to the conflict's effects on markets and household purchasing power. This has resulted in poor households relying to a larger degree on non-traditional sources, including assistance from family and friends and humanitarian assistance, where available, to try to meet food needs.

WFP'S MVAM SURVEYS

Since August 2015, WFP has been collecting food consumption score (FCS) and reduced coping strategies index (rCSI) data through cell phone-based surveys in Ta'izz. Based on February 2016 data, 32 percent of surveyed households reported having poor food consumption and an additional 28 percent reported borderline food consumption. The proportion of the population with poor food consumption has been relatively stable since the start of data collection in August. Meanwhile, median rCSI amongst surveyed households in February was 21, which is up compared to rCSI collected in January but relatively similar to rCSI collected in December

and August 2015. Both median rCSI and the percentage of the population with poor food consumption is up sharply compared to the results of the 2014 CFSS, where 23 percent of respondents had poor food consumption and the median rCSI was 10⁵.

HUMANITARIAN ASSISTANCE

Food assistance reached about 166,000 and 169,000 beneficiaries in December and January, respectively, with about 2,810 to 2,852 MT of food commodities in both months.

Assumptions

The most likely scenario for the February to September 2016 period is based on the following zone-level assumptions:

- Poor households will have inconsistent and below-average access to remittances, both from other governorates and Saudi
 Arabia, due to continued conflict in rural areas and fragile remittance services systems. Payments of public sector salaries will
 also be delayed due to similar issues.
- Fuel availability (diesel, petrol, cooking oil) will continued to be constrained, resulting in prices that are volatile and above preconflict levels.
- While better-off households will continue to grow qat, production will be at below-average levels due to the volatility of diesel prices used to power irrigation pumps. Reduced gat production will limit agricultural labor opportunities for poor households.
- Incomes from livestock sales will continue to be below average. A halt in livestock exports, particularly towards Saudi Arabia between June and September (the Eid seasons), as well as continued disruptions of trade routes to markets in nearby governorates, will cause livestock prices to decline to below-average levels, with negative impacts on poor households' incomes.
- The prevalence of global acute malnutrition will likely exceed pre-conflict levels due to the continued effects of below-average food availability and access on nutritional outcomes. According to SMART surveys conducted in the livelihood zone before the start of recent conflict in February 2012 and May 2014, the prevalence of global acute malnutrition amongst children under 5 years of age, measured by a weight-for-height z-score <-2 and/or the presence of edema, was 9.4 [95% CI: 7.4 11.9] and 11.8 [95% CI: 9.7 14.3].

Most Likely Food Security Outcomes

The continued effects of conflict on household food and incomes sources, along with above-average food prices and stretched resources as local households support IDPs in their communities, have severely limited household purchasing power for poor households in the livelihood zone. As a result, many poor households will sell assets (ex. land, agricultural tools, etc.) and reduce the number and diversity of their meals. Food consumptions gaps, increasing global acute malnutrition, and the extreme depletion of livelihoods disruptions are expected to continue into the coming months, with an increasingly large number of people declining into Emergency (IPC Phase 4) acute food insecurity between February and September 2016.

Famine Early Warning Systems Network

⁵ Please note that cell phone based surveys are likely biased towards better-off and urban populations who have access to cell phones. These biases should be kept in mind when comparing these survey results with in-person representative household surveys conducted prior to the conflict.

EVENTS THAT MIGHT CHANGE THE OUTLOOK

Table 1: Possible events over the next eight months that could change the most-likely scenario.

| Area | Event | Impact on food security outcomes |
|--|--|---|
| National | Expansion of ground fighting to Sana'a City | Suspension of international and local remittance systems, with serious implications for livelihoods, business functioning, and salary payments across the country Increased number of people facing Crisis (IPC Phase 3) or Emergency (IPC Phase |
| | Significant depreciation of the official Yemen rial to USD exchange rate | 4) food insecurity Reduction of food and non-food imports result in reduced food availability and a sharp increase in prices. Household purchasing power would deteriorate, leading to a larger food insecure population. |
| | Political resolution results in a long-term ceasefire | Improved humanitarian access to conflict areas, including Ta'izz Improved imports and domestic trade flows increase food availability at the local market level, resulting in lower food prices and better access Slow recovery of household livelihoods improves income levels Food security outcomes would be better than the levels currently projected |
| | Increased humanitarian assistance | Food access would improve, resulting in better food security outcomes than currently projected |
| Western, central, and northern governorates | Expansion of ground fighting to lowland areas of Hajjah and Al Hodaydah | Port operations in Al Hodaydah, including Al Saleef, could be suspended, reducing national monthly food and fuel imports Prices of food and non-food items would increase, resulting in a further deterioration of household purchasing power and increased levels of food insecurity |
| Eastern and southern governorates | War in Hadramout and southern areas against AQAP and ISIL | Port functioning at Al Mukalla could be reduced, negatively affecting monthly imports and increasing food prices in areas dependent on this port. Supply routes between Aden, Shabwah, Hadramout, Abyan, and Lahij could also be disrupted. |

ABOUT SCENARIO DEVELOPMENT

To project food security outcomes over a six-month period, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes those assumptions in the context of current conditions and local livelihoods to develop scenarios estimating food security outcomes. Typically, FEWS NET reports the most likely scenario. To learn more about this approach to scenario development, visit www.fews.net/scenario development.