

# YEMEN JOINT MONITORING REPORT

BIMONTHLY UPDATE ON FOOD AND NUTRITION SECURITY CRISIS RISKS

MARCH 2024 - REPORT #2

## KEY MESSAGES

- Joint Monitoring Report (JMR) modeling – using data until January 2024 – shows that 2.5 million people live in areas at risk of experiencing a deterioration into IPC 4+ in both Government of Yemen (GoY) and Ansar Allah (AA)-controlled areas, a similar figure to previous JMR modeling in October 2023. The drought indicator raised four critical risk alerts in four different districts, while exchange rate, displacement, and conflict risk indicators raised a total of 150 heightened risk alerts in 128 districts (see Table 1).
- In February 2024, the IPC issued a new [analysis update](#) for GoY-controlled areas<sup>1</sup> covering the period from October 2023–February 2024 indicating that the number of people in IPC 3 and IPC 4 increased by 18%, from 3.9 million to 4.6 million people, compared to the initial analysis, that covered projections from June–December 2023. The JMR model had also identified an increase of people at risk of experiencing a deterioration into IPC Phase 4 in December JMR (see Annex IV).
- The deterioration in food insecurity in GoY-controlled areas, as reported in the IPC analysis, is driven by deteriorating economic conditions and continued localized conflicts. These events have undermined some of the progress made in 2023, following the conclusion of the truce period
- In January 2024, the JMR model flagged four critical and one heightened risk alerts for drought in Abyan, Al Bayda, Hajjah, and Ta'iz governorates. Mild vegetation stress was observed, especially in Abyan, Al Bayda, Lahj, Sa'dah, and Ta'iz. While December was notably dry, it did not reach drought conditions.
- In January 2024, the monthly average of the Yemeni rial in GoY-controlled areas depreciated reaching YER 1,552/ USD 1 – its lowest value since December 2021 – raising alerts in all 136 GoY-controlled districts.
- The impact of Cyclone Tej, which made landfall in Yemen in October 2023 and caused flash floods, resulted in ten heightened displacement alerts in the affected districts of Al Maharah and Hadramawt governorates in January 2024.
- According to WHO, from January 1 to March 17 2024, 1,566 suspected cholera cases were recorded in 15 governorates, with nine confirmed cases and six deaths. Preparedness measures are key to addressing the drivers of cholera prior to the start of the rainy season in April. However, challenges implementing preventative measures persist due to low vaccines supply and resources. In 2023, Yemen witnessed outbreaks of measles, dengue fever, diphtheria, polio, and acute watery diarrhoea, straining its already weakened healthcare system and imposing financial burdens on poor households.
- AA attacks on ships in the Red Sea since November 2023 prompted the US and UK to launch Operation Poseidon Archer in January 2024 to counter them. Despite these efforts, AA attacks persisted. [Clashes](#) have also occurred domestically, involving various factions, such as the Southern Transitional Council (STC) Shabwani Defense Forces, Giants Brigades, and AA forces. Incidents occurred in key districts in Shabwah and Al Bayda, indicating the strategic significance of these areas underscored by the deployment of reinforcements and intense fighting. Tribal conflicts and isolated attacks further contributed to the volatile security situation.
- As at February 2024, FAO and WFP observed a slight year-on-year decline in inadequate food consumption, below 10%. However, between November 2023 and February 2024, significant deterioration occurred in inadequate food consumption in AA-controlled areas, except for Al Mahwit, Dhamar, Sana'a, and Sana'a City. Former WFP beneficiary households, no longer receiving aid since December 2023, saw severe food deprivation rise from 24% in November 2023 to 38% in February 2024. In January 2024, [WFP reported](#) that 55% of surveyed households in GoY-controlled areas reported inadequate access to food.
- [Attacks in the Red Sea](#) since November 2023 have prompted a shift in global shipping routes, as vessels avoid the area and opt instead for longer journeys via the Cape of Good Hope. This rerouting led to increased voyage times and costs. War risk premiums increased up to 1% of ship value. Import volumes to Yemen, however, have not been negatively impacted so far. Food and fuel imports increased in January, while food prices remained stable. Amid ongoing tensions, the JMR team continues to closely monitor import dynamics and food price variations to assess the risks to Yemen's food and nutrition security.

<sup>1</sup> IPC analysis for Ansar Allah (AA)-controlled governorates is currently under quality review.

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## AGGREGATED CRISIS RISK INDICATOR ALERTS AND RISK SEVERITY

This section provides a summary of the heightened and critical alerts recorded per JMR key indicators monitored to flag a deterioration in the food and nutrition security situation. See Annex I and Annex II for more detailed governorate and district indicator alert breakdowns. The deterioration of the exchange rate in GoY-controlled areas raised heightened risk alerts in 136 districts in GoY-controlled areas, same as in December 2023 JMR. Displacement and conflict also raised heightened risk alerts. Drought recorded four critical and one heightened risk alert. See Table 1 for a countrywide summary of heightened and critical food and nutrition security risk alerts by indicator.

**Table 1.** Number of heightened and critical food security risk alerts<sup>2</sup> countrywide by indicator in Jan 2024 and Oct 2023

| INDICATORS   | CRITICAL RISK ALERTS | HEIGHTENED RISK ALERTS | GOVERNORATE                          | CRITICAL RISK ALERTS | HEIGHTENED RISK ALERTS | GOVERNORATE             |
|--|----------------------|------------------------|--------------------------------------|----------------------|------------------------|-------------------------|
|  | Jan 2024             |                        |                                      | Oct 2023             |                        |                         |
|  Drought        | 4                    | 1                      | Abyan<br>Al Bayda<br>Hajjah<br>Ta'iz | 0                    | 0                      |                         |
|  Exchange rate | 0                    | 136                    | All GoY governorates                 | 0                    | 136                    | All GoY governorates    |
|  Displacement | 0                    | 11                     | Al Maharah<br>Hadramawt<br>Ibb       | 10                   | 11                     | Al Maharah<br>Hadramawt |
|  Conflict     | 0                    | 2                      | Dhamar<br>Shabwah                    | 0                    | 7                      | Dhamar<br>Ibb           |
|  Food prices  | 0                    | 0                      |                                      | 0                    | 0                      |                         |
|  Fuel prices  | 0                    | 0                      |                                      | 0                    | 15                     | Lahj                    |

JMR modelling<sup>3</sup> for January 2024 shows a similar situation as at October 2023, with 2.5 million people living in areas at risk of experiencing a deterioration in food and nutrition security into IPC 4+. See Annex IV for a historical overview of the population at risk of experiencing a deterioration in food and nutrition security (e.g. transitioning to IPC 4+) between January 2014 and January 2024.

<sup>2</sup> Critical alerts identify areas where a deterioration in food security is almost certain based on historical trends. These areas should be considered high priority for decision makers. Heightened alerts identify areas where there is a high chance of deterioration in food and nutrition security and give decision makers a good overview of current food and nutrition security trends countrywide.

<sup>3</sup> The JMR uses a statistical model (Generalized Linear Model) to calculate the risk of food and nutrition insecurity in different districts. It does this by analyzing various risk alerts and how important they are in predicting a deterioration in food and nutrition security. A confidence score of the likelihood of a deterioration is then multiplied by the district's population to estimate the expected number of people living in areas at risk of experiencing a deterioration in food and nutrition security (e.g. transitioning to IPC 4+). Please note that this is a prediction and the JMR does not formally classify IPC phases for districts.

## SELECTED CRISIS RISK INDICATOR ANALYSIS

This section provides contextual information in relation to each crisis risk indicator. It analyzes the factors triggering the heightened or critical risk alerts summarized in the previous section.

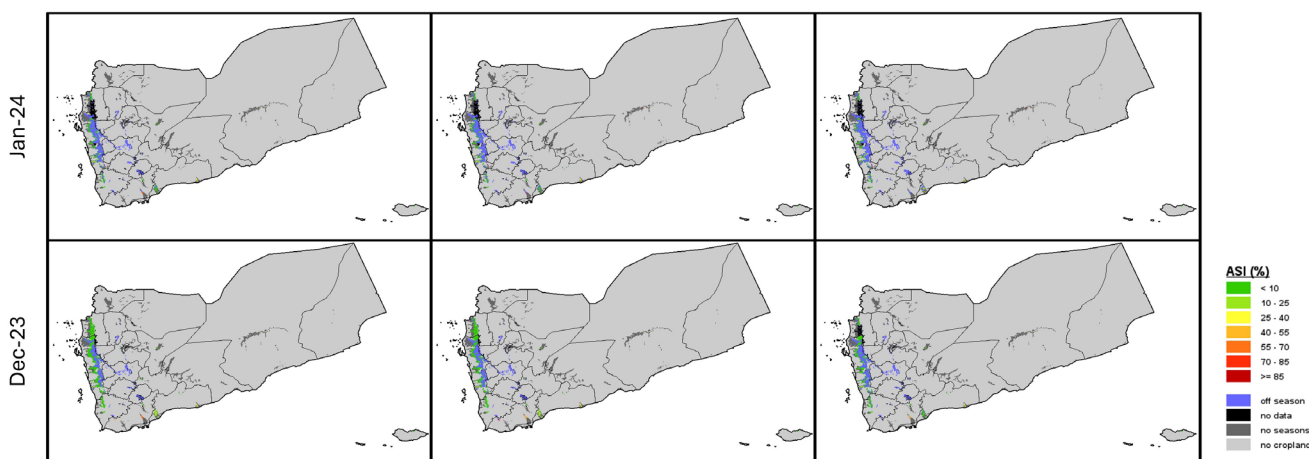
### DROUGHT

In January 2024, the JMR model recorded four critical and one heightened risk alerts for drought in the governorates of Abyan, Al Bayda, Hajjah, and Ta'iz. This follows a much higher number of alerts related to drought recorded in December, namely 83 critical and 23 heightened risk alerts. The districts affected were largely located in Abyan, Ad Dali', Aden, Al Bayda, Al Jawf, Dhamar, Hajjah, Ibb, Lahj, Sa'dah, Sana'a, and Ta'iz. Analyses of vegetation conditions revealed the presence of mild stress in some governorates, especially Abyan, Al Bayda, Lahj, Sa'dah, and Ta'iz. The dry conditions observed were further examined using the Agricultural Stress Index (ASI) and, although very dry, December did not reach enough extreme dry conditions to be classified as a drought.

Analyses of agrometeorological conditions in December 2023 show that the whole country was generally dry compared to the historical average, apart from a few areas. The dry conditions prevalent across the country were also captured by satellite observations from the beginning to the end of the month. Rainfall anomalies show that the little rainfall received in some parts of the country rendered December 2023 slightly wetter than long-term averages (LTA). Central parts of Hadramawt have received more water than the LTA. The Agricultural Stress Index (ASI) of the FAO GIEWS is valuable data used as a global indicator for drought likelihood in cropped areas. ASI estimates for the months of December 2023 and January 2024 convey that most areas are off-season, except for the Central and Northern Highlands and Eastern Plateau, where wheat is at the growing stage (Figure 1).

Regarding wheat production, more localized vegetation condition index (VCI) analyses show that some parts of the country – Amanat Al Asimah, Dhamar, Ibb, Sa'dah, and Ta'iz governorates – were exhibiting broadly normal to poorer conditions in vegetation performance, more particularly in cropped and grazed vegetation, for the months of December 2023 and January 2024. Conversely, the vegetation performance increased in most of Hajjah governorate as compared to the LTA. Al Hodeidah showed steady vegetation performance. Total cereal production in 2023 was estimated to be nearly 420,000MT, significantly less than the five-year average of about 550,000 MT as reported by FAO. The average area planted with cereals remained the same, less than 500,000 hectares.

**Figure 1.** ASI estimates for Dec 2023 and Jan 2024



Source: FAO GIEWS (accessed 12/02/2024)

### Exchange rate

The exchange rate in GoY-controlled areas continued to depreciate, reaching an average of YER 1,552/USD 1 in January 2024, a 6% depreciation compared to October and a 26% depreciation compared to January 2023 (Figure 2). This resulted in 136 heightened risk alerts in all GoY-controlled governorates. The main reason for the currency depreciation is the reduced

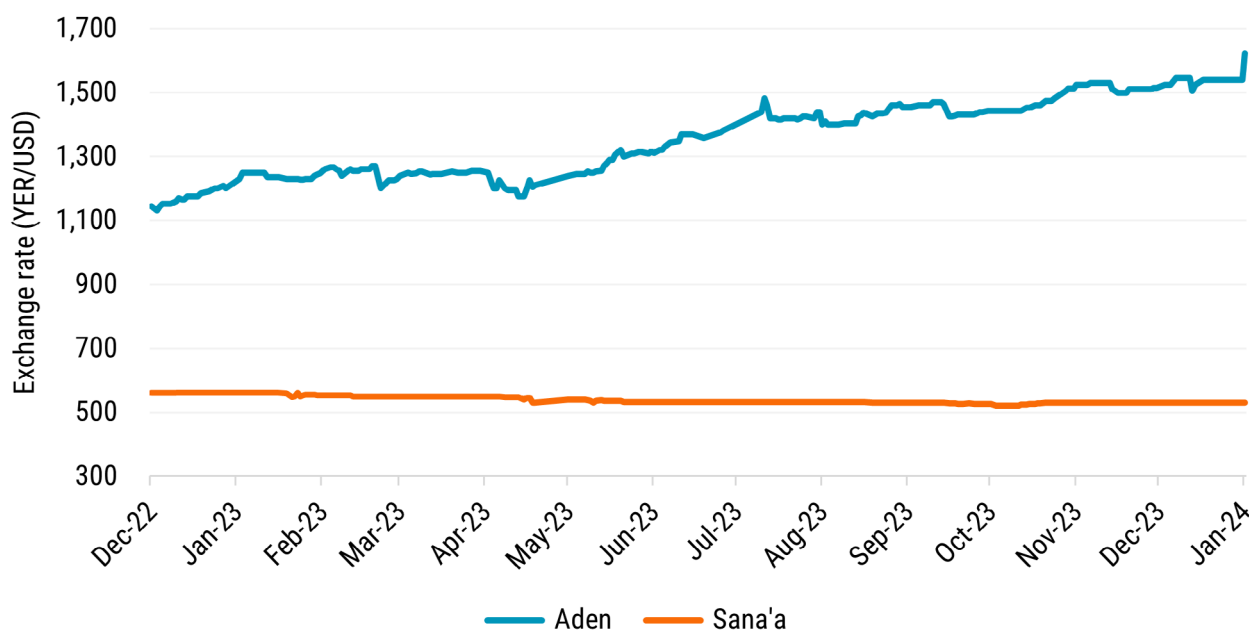
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availability of [foreign currency](#) reserves driven by the decline in revenues from reduced crude oil exports and remittance flows, as well as the ban in AA-controlled areas on sales of liquefied petroleum gas (LPG) produced in Ma'rib. Low foreign currency reserves led the Central Bank of Yemen in Aden to cancel foreign currency auctions in November and December 2023, although they resumed in January 2024. The monthly average exchange rate in AA-controlled areas in January 2024 was YER 525/USD 1, a 5% appreciation compared to January 2023 and similar to the monthly average in October 2023.

**Figure 2.** YER exchange rate in Aden (GoY) and Sana'a (AA) between Dec 2022 and Jan 2024



Source: ACAPS YETI (accessed 29/02/2024)

## Displacement

The JMR model recorded 11 heightened displacement risk alerts in January 2024. Out of these, ten alerts correspond to districts in Al Maharah and Hadramawt that recorded critical alerts in October as a result of increased displacement driven by the impact of Cyclone Tej. This corresponds to a reduced risk level since October. Extensive damage to agricultural land and fisheries has severely disrupted food supply chains and worsened conditions for affected communities.

The remaining heightened risk alert was recorded in Al Odayn district in Ibb governorate. In January 2024, five households were [displaced](#) from Al Odayn (same as in December) to districts in Ma'rib and Ta'iz governorates. Of these, four households cited reasons for their displacement that related to conflict and general insecurity, while the remaining one cited economic reasons, specifically increasing market prices.

## Conflict

Throughout January 2024, [clashes](#) between various factions in Yemen resulted in the raising of two heightened risk alerts in the neighboring Markhah Al Olya district in Shabwah governorate and Jabal Ash Sharq district in Dhamar governorate.

The clashes involved various factions, including the Southern Transitional Council (STC) Shabwani Defense Forces, Giants Brigades, and AA forces. These clashes primarily unfolded in several key districts and fronts, notably Bayhan in Shabwah governorate, and in Nati' and Nu'man districts in Al Bayda governorate, indicating widespread impact across the region. The forces engaged in offensives, artillery exchange, and shelling, resulting in significant material and human losses, with fatalities reported on all fronts. The strategic importance of these locations is evident from the deployment of reinforcements and the intensity of clashes. Tribal conflicts and isolated attacks added to the unrest, illustrating the volatile situation in the region.

On 12 January 2024, following further attacks from AA, US and UK airstrikes targeting AA sites hit over 60 targets at 16 locations, including command and control nodes, munitions depots, launching systems, missile and drone production facilities, and air defense radar systems. The strikes resulted in seven fatalities and several injuries among AA forces.

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## Food prices

In January 2024, the cost of the minimum food basket (MFB) in GoY-controlled areas remained similar to the cost in December 2023 at around YER 114,000, and only 0,8% higher when compared to January 2023. No alerts were recorded in the JMR model for food prices. However, WFP reported that high food prices constitute a barrier to accessing adequate food for 19% of households in GoY-controlled areas. In AA-controlled areas, the MFB cost decreased by 0.3% compared to December 2023, from YER 47,946 to YER 48,072. On a yearly basis the MFB cost in AA area decreased by 12%, a reduction attributed to currency appreciation, the implementation of price caps, and reduced fuel prices.

The price of sugar increased by 9% and 41% in AA and GoY-controlled areas respectively, the result of a near 16% increase in its global price year-on-year. The impact of global price increase of sugar on the MFB cost has been offset by a reduction in the global price of cereals (down by 19%), dairy (down by 18%), and oils (down by 13%) compared to January 2023.

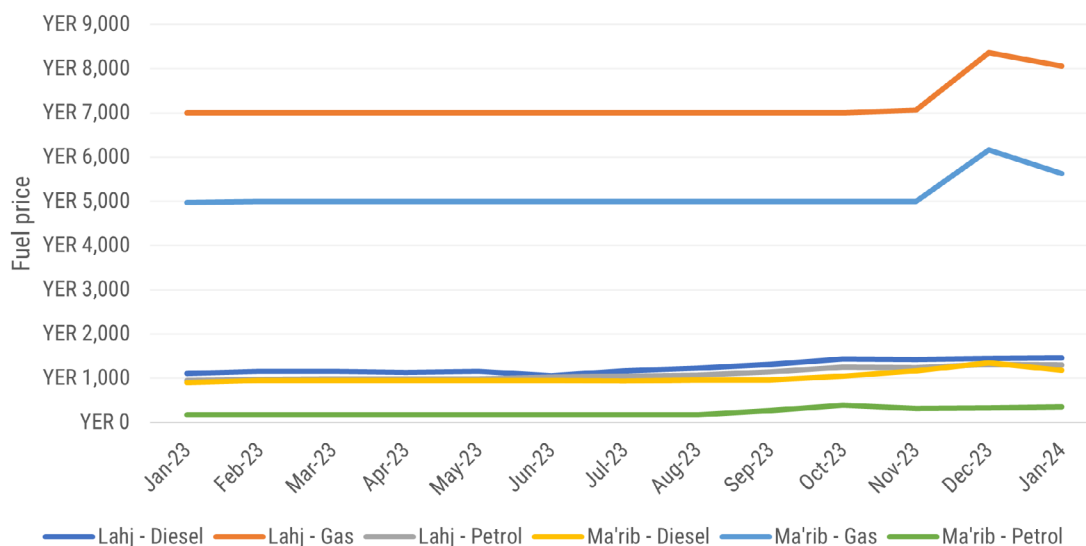
## Fuel prices

The JMR model takes into consideration average diesel, petrol, and LPG prices. Overall, in GoY-controlled governorates, the average price of petrol and diesel remained significantly higher, by 21% and 22% respectively, when compared to the beginning of 2023, primarily resulting from continued currency depreciation. In AA-controlled areas, petrol and diesel pump prices in January 2024 saw a slight decline month-on-month, with an overall decrease of 8% and 21% respectively since January 2023. LPG prices decreased by 8% and 7% in GoY and AA-controlled governorates respectively between January 2023 and January 2024.

While no alerts were raised in January 2024, it is worth noting that fuel price increases raised a total of 29 heightened risk alerts in December 2023 in Ma'rib and Lahj governorates. The data shows that diesel prices in Ma'rib increased by 29% in December, as compared to October, and by 50% compared to the beginning of 2023; petrol prices decreased by 17% compared to October but were 85% higher compared to January 2023. On 18 December, the Ma'rib Oil Company increased the price of petrol from YER 175 to YER 487 per liter, but reduced it slightly to YER 400 per liter on 20 December. Following two weeks of armed clashes and protests by tribes in Ma'rib, the Ma'rib governor – in agreement with the central Government – opted to stop the increase for a period of 28 days and committed to covering the difference between the old and new prices. In Lahj, diesel prices increased by 1.4% in December compared to October and by 31% compared to January 2023; petrol prices in December saw a higher increase, by 4.8% and 38% respectively, when compared to October and January 2023.

The LPG price decreased in all GoY-controlled governorates except Ma'rib and Lahj, where it increased by 23% and 18% respectively from October–December 2023 (Figure 3). As LPG prices had a near fix rate in these governorates from the beginning of 2023 to November, the price difference between January and December is also of 23% and 18% for Ma'rib and Lahj respectively.

**Figure 3.** Fuel prices in Ma'rib and Lahj between Jan 2023 and Jan 2024



Source: WB (11/03/2024)

## OTHER INDICATORS

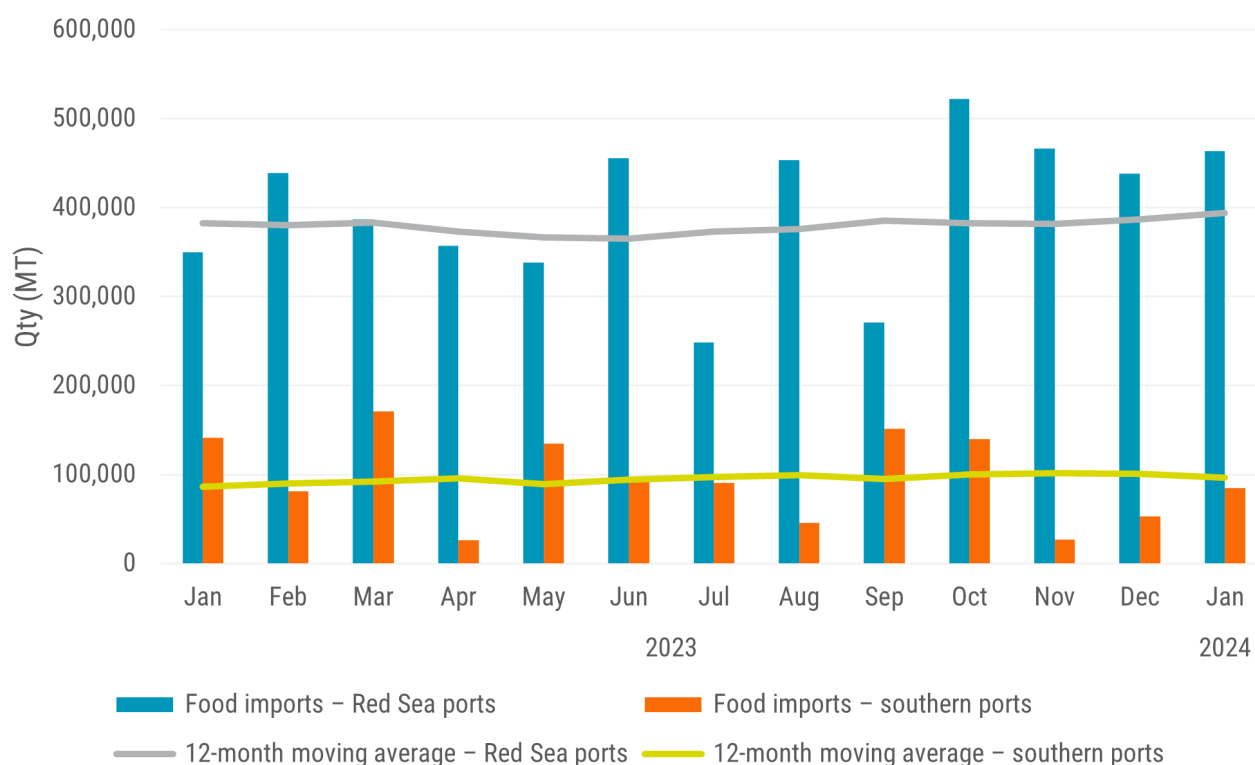
This section covers other contextual information about relevant indicators related to food and nutrition security in Yemen.

### Food imports

Food import volumes to Yemen increased in January despite the escalation in the Red Sea affecting global shipping routes. In January 2024, food imports through all ports amounted to 548,000MT, a 10% increase compared to December 2023 and nearly 11% above the 12-month moving average.

Analysis of imports through ports in both GoY and AA-controlled areas showed that import volumes in southern ports under GoY control increased by 60% in January 2024 compared to December 2023, although volumes still remained slightly below the 12-month moving average (by 12%). Conversely, food imports through Red Sea ports under AA control also increased in January compared to December (by 6%) and have been above the 12-month moving average since October (Figure 4).

**Figure 4.** Monthly food imports (by ports) between Jan 2023 and Jan 2024



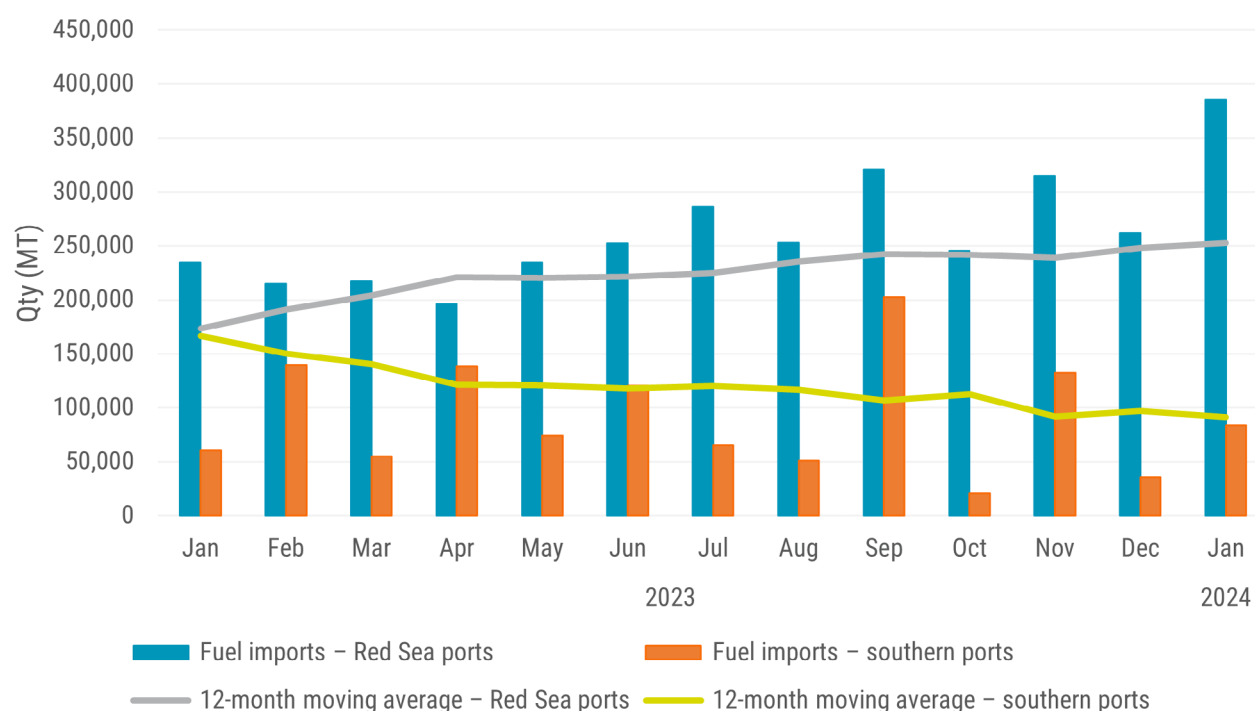
Source: ACAPS YETI (accessed 29/02/2024)

### Fuel imports

Overall, fuel imports in January 2024 increased by 37% compared to December 2023, driven by increased import volumes through both Red Sea and southern ports, and were 27% above the 12-month moving average.

In January 2024, Red Sea ports recorded the highest volumes of fuel imports since at least August 2017 (based on available data), at 34% above the 12-month moving average. Fuel import volumes through southern ports also increased compared to December 2023, but remained 9% below the 12-month moving average (Figure 5).

**Figure 5.** Monthly fuel imports (by ports) between Jan 2023 and Jan 2024



Source: ACAPS YETI (accessed 29/02/2024)

## Cholera cases

Since the final quarter of 2023, Yemen witnessed a significant surge in suspected cholera cases. According to the Ministry of Health, in the first eleven weeks of 2024 (until mid-March) a total of 1,566 suspected cases were reported in 15 governorates, including 9 confirmed cases and 6 deaths. The majority of suspected cases were reported in Sa’adah (60%), followed by Sana’a (8%), Al Bayda (5%), Al Mahwit (5%), Ibb (4%), Ad Dali’ (4%), Ma’rib (3%), and Amran (3%).

Challenges to addressing the outbreak include low global vaccine supply and resource shortages. To bridge funding gaps, the Yemen Humanitarian Fund has allocated USD 26 million to combat disease outbreaks and mitigate the effects of flooding, focusing on health, nutrition, and WASH services across high-risk areas. Preparedness measures are key to addressing the drivers of cholera prior to the start of the rainy season in April.

Prompt and specific health interventions – i.e. preventive programs – can control the risk factors that increase disease transmission and/or reduce health-related risk factors that cause or contribute to malnutrition. Multiple localized outbreaks of measles, dengue fever, diphtheria, polio, and acute watery diarrhea were also reported across the country in 2023. For Yemen’s already stretched public health system, which suffers from lack of funding, qualified staff, medicine, and supplies, these outbreaks are a significant burden. The further stretching of the health system is leading to high out-of-pocket expenses for healthcare; expenses that pose a significant financial challenge especially to poor households.



## FOOD AND NUTRITION SECURITY OUTCOMES

### Food Consumption Score (FCS)

According to the food security monitoring conducted by FAO and WFP as at February 2024<sup>4</sup>, the year-on-year comparison of inadequate food consumption scores indicated a moderate deterioration, below 10%. However, between November 2023 and February 2024 there has been a notable deterioration in inadequate food consumption in AA-controlled areas, with the exception of Al Mahwit, Dhamar, Sana'a, and Sana'a City governorates, which reported a relatively stable food security situation. Poor food consumption (severe deprivation of food) increased from 24% in November 2023 to 38% in February 2024, among previous WFP beneficiary households who are no longer receiving assistance as of December 2023.

In GoY-controlled regions, 55% of households reported inadequate food consumption in January 2024, with the governorates of Ad Dali', Al Bayda, Al Jawf, Lahj, Ma'rib, and Shabwah reporting a significant level of inadequate food consumption. Continuing to meet these needs is critical, including with adequate support to the [2024 Humanitarian Response Plan](#).

### Reduced Coping Strategies Index (rCSI)

In January 2024, 55% of households surveyed had adopted extremely negative food-based coping strategies (rCSI  $\geq$  19), a 5% improvement compared to December 2023, when 58% of households reported often resorting to food-based coping strategies. Despite moderate improvement in most governorates, the situation deteriorated in January 2024 in Aden, Al Mahwit, Dhamar, Hadramawt, Hajjah, Ma'rib and Shabwah governorates. Overall, conditions may improve temporarily with Ramadan and Eid-al-Fitr in March–April 2024.

### Moderate Acute Malnutrition (MAM) and Severe Acute Malnutrition (SAM)

Between November 2023 and January 2024, MAM and SAM admissions decreased in Yemen, typical of seasonal patterns, where the highest number of admissions are usually observed between July–October. Al Hodeidah and Hajjah governorates, however, still reported a high number of MAM and SAM admissions. Persistent challenges such as food insecurity, limited healthcare access, poor WASH conditions, and infrastructure gaps hinder progress in addressing malnutrition. Low breastfeeding rates and inadequate complementary feeding worsen the situation. While the suspension of the WFP's General Food Distribution program may not immediately impact nutrition, household food security will deteriorate gradually, reducing calorie intake for children and potentially increasing malnutrition rates. UNICEF anticipates potential and atypical higher rates of acute malnutrition in the coming months, especially after the end of Ramadan in April.

## OUTLOOK

### Food security situation

The food and nutrition security situation is not expected to deteriorate in March-April, as zakat, remittances, and other cash transfers are likely to increase during Ramadan and Eid festivities. According to FAO and WFP the food security situation is likely to deteriorate starting in May-June 2024, with the peak of lean season, the deteriorating economic conditions in GoY-controlled areas, possible further escalation of the Red Sea crisis and the decline in humanitarian assistance.

### Red Sea escalation and import dynamics

On 19 November 2023, AA began launching attacks on commercial vessels in the Red Sea in retaliation for Israel's military response in Gaza following the attack of Hamas, which governs the Gaza Strip, against Israel on 7 October 2023. By the end of January 2024, AA forces had launched more than 30 attacks against vessels in the Red Sea, resulting in 3 fatalities and including 17 hostages among crew members. On 12 January 2024, with the aim of putting a stop to the AA attacks, the US and UK conducted military strikes in Yemen, targeting areas under AA control. The strikes reportedly focused on radar systems, air defense infrastructure, and storage and launch facilities for unmanned aerial systems, cruise missiles, and ballistic missiles.

<sup>4</sup> The comparison includes February data in order to provide the most up to date analysis relevant to this indicator.



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The Red Sea route typically handles **15% of global maritime trade**. Despite most attacks failing to significantly affect vessels, numerous shipping companies have opted to **reroute ships** through the Cape of Good Hope, bypassing the Red Sea route and Suez Canal. This detour is expected to extend journey times by **10–14 days**. With major companies avoiding the Red Sea route, freight volumes on this path are estimated to have **decreased by 65%** compared to anticipated levels. Escalating attacks in the Red Sea have also resulted in a continuous rise in war risk premiums. On 16 January 2024, war risk premiums surged to about 1% of a ship's value, up from 0.5–0.7% on 18 December 2023 and a mere 0.07% in early December. This **spike in premiums** has translated into hundreds of thousands of dollars in additional costs for a seven-day voyage.

As at mid-January 2024, war risk premium rates for ships calling at Yemen's Red Sea ports stood at 0.62% of a ship's value (for 14-day coverage) and 0.4% for Gulf of Aden ports. So far, the increase in shipping costs have not translated into increased food prices in Yemen, likely offset by price decreases for certain commodities on the global market. Food imports have also not been affected, as volumes increased in January 2024.

Further escalations in the Red Sea, that could affect key food supply chain facilities in Yemen, such as seaports and warehouses, could potentially impact the country's food and nutrition security situation. The Red Sea crisis, as well as other global developments, require close and continuous monitoring to highlight potential risks related to Yemen's food supply and the consequences on food and nutrition security in the country.

## Rainfall forecasts

Rainfall forecasts show a progressive increase from January–March 2024. Cumulative amounts will likely not surpass the 40mm threshold, resulting in a reduced risk of flash floods. The small amounts of rain expected will have a positive impact on crop production, as the season will be at the planting stage for most cereals. The increase will be more noticeable in western and northern governorates: Al Hodeidah, Al Jawf, Al Mahwit, Hajjah, Ibb, Sa'dah, and Ta'iz. As the beginning of the rainy season approaches, it will benefit the crop production rainfall by March 2024, but still not enough to trigger a flood warning.

## ANNEXES

### Annex I. Number of JMR alerts by governorate in January 2024

Table 2 shows the number of JMR district alerts for each indicator by governorate. For January 2024, exchange rate alerts were raised in 136 districts in ten different governorates. Displacement alerts occurred in three governorates, while conflict alerts occurred in two governorates. Drought raised three critical alerts in four governorates.

**Table 2.** Number of JMR district alerts by governorate

| GOVERNORATE | DROUGHT    |          | EXCHANGE RATE |          | DISPLACEMENT |          | CONFLICT   |          |
|-------------|------------|----------|---------------|----------|--------------|----------|------------|----------|
|             | HEIGHTENED | CRITICAL | HEIGHTENED    | CRITICAL | HEIGHTENED   | CRITICAL | HEIGHTENED | CRITICAL |
| Hajjah      |            | 2        |               |          |              |          |            |          |
| Abyan       |            | 1        | 11            |          |              |          |            |          |
| Al Bayda    |            | 1        |               |          |              |          |            |          |
| Hadramawt   |            |          | 28            |          | 2            |          |            |          |
| Ta'iz       | 1          |          | 23            |          |              |          |            |          |
| Shabwah     |            |          | 17            |          |              |          | 1          |          |
| Lahj        |            |          | 15            |          |              |          |            |          |
| Ma'rib      |            |          | 14            |          |              |          |            |          |
| Ad Dali'    |            |          | 9             |          |              |          |            |          |
| Al Maharah  |            |          | 9             |          | 8            |          |            |          |
| Aden        |            |          | 8             |          |              |          |            |          |
| Socotra     |            |          | 2             |          |              |          |            |          |
| Dhamar      |            |          |               |          |              |          | 1          |          |
| Ibb         |            |          |               |          | 1            |          |            |          |
| Total       | 1          | 4        | 136           |          | 11           |          | 2          |          |

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## Annex II. JMR alerts by district in January 2024 – top districts at risk of food and nutrition security deterioration

Table 3 shows JMR alerts by district. The districts with the highest risk of food and nutrition security deterioration are highlighted. The table highlights critical alerts, heightened alerts, and typical status per food security risk indicator by district.

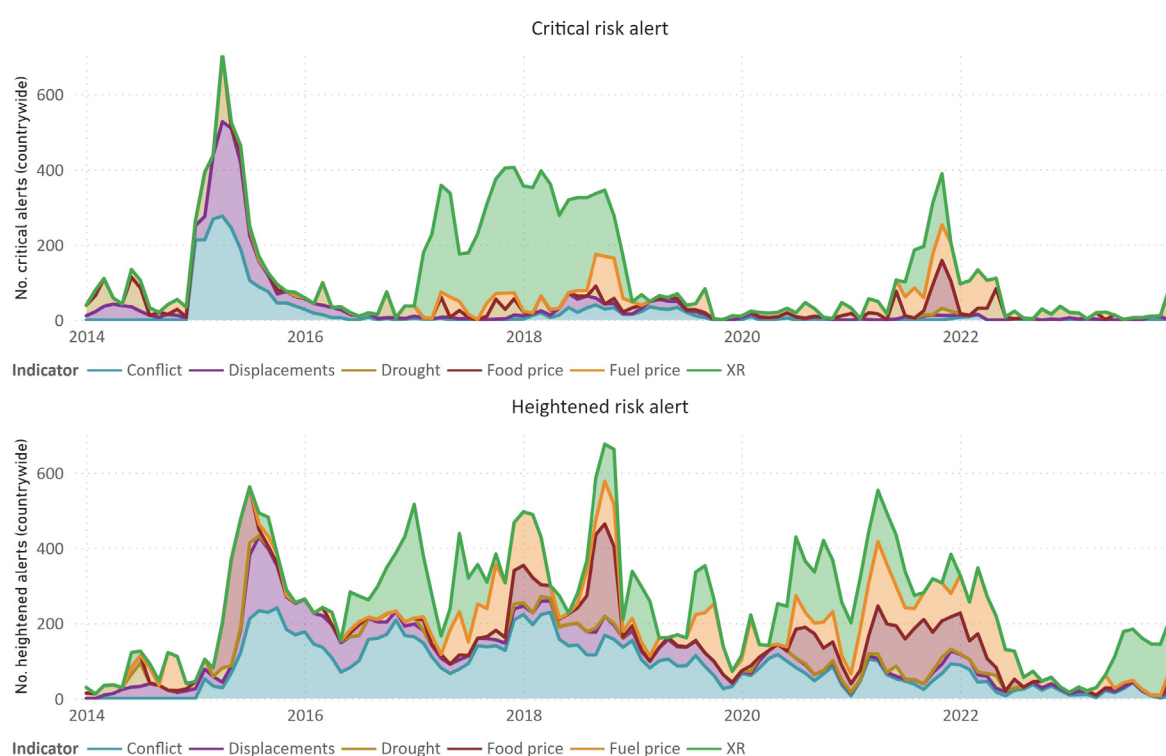
**Table 3.** JMR alerts by district with a higher risk of food and nutrition security deterioration

| GOVERNORATE | DISTRICT               | CONFLICT | DISPLACEMENTS | DROUGHT | FOOD PRICE | FUEL PRICE | EXCHANGE RATE |
|-------------|------------------------|----------|---------------|---------|------------|------------|---------------|
| Al Maharah  | Al Ghaydhah            | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Al Masilah             | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Haswin                 | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Hat                    | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Hawf                   | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Man'ar                 | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Qishn                  | 0        | 1             | 0       | 0          | 0          | 1             |
| Al Maharah  | Sayhut                 | 0        | 1             | 0       | 0          | 0          | 1             |
| Hadramawt   | Ad Dis                 | 0        | 1             | 0       | 0          | 0          | 1             |
| Hadramawt   | Ar Raydah wa Qussay'ar | 0        | 1             | 0       | 0          | 0          | 1             |
| Abyan       | Sarar                  | 0        | 0             | 2       | 0          | 0          | 1             |
| Shabwah     | Markhah Al Olya        | 1        | 0             | 0       | 0          | 0          | 1             |
| Ta'iz       | Dhubab                 | 0        | 0             | 1       | 0          | 0          | 1             |

## Annex III. JMR historical heightened and critical risk alerts (January 2014 to January 2024)

Figure 6 shows the historical breakdown of JMR food and nutrition security risk alerts by indicator for all districts. A maximum score of 1,998 is possible where all 333 districts have alerts for all six food and nutrition security crisis risk indicators. The higher the score, the worse the deterioration in food and nutrition security.

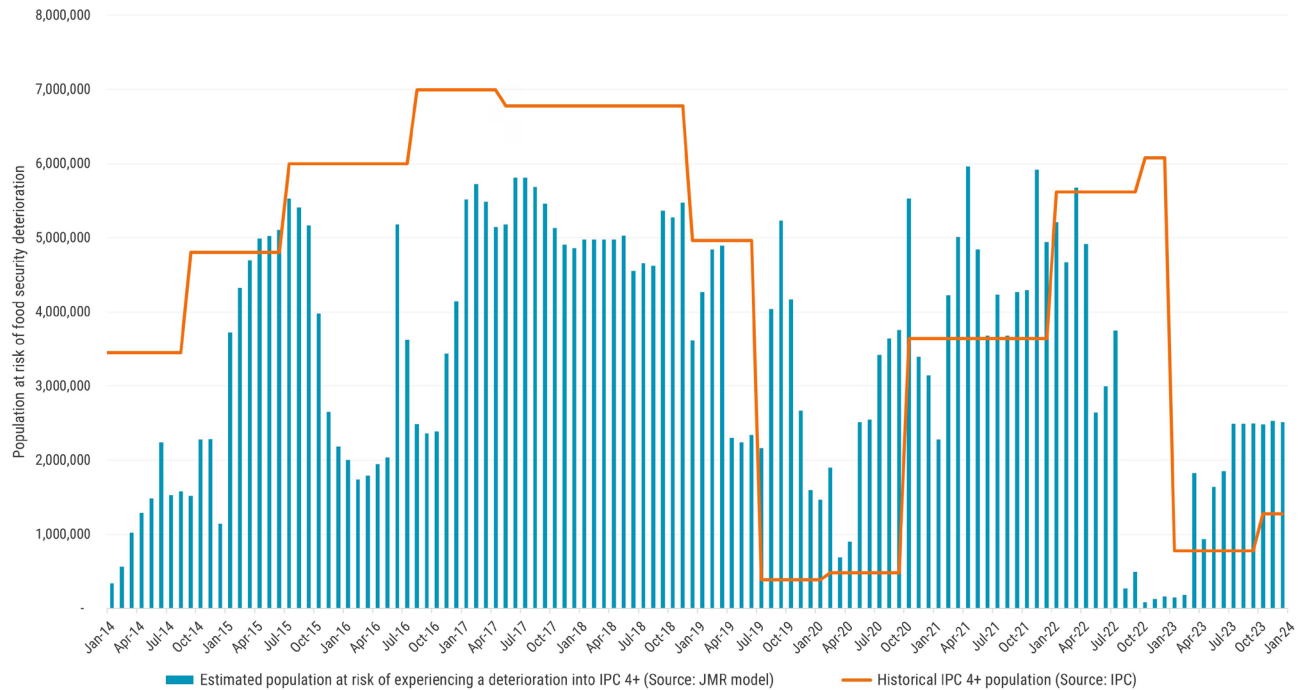
**Figure 6.** Historical JMR heightened and critical risk alerts



## Annex IV. Historical overview of the population at risk of experiencing a deterioration in food and nutrition security into IPC 4+ (January 2014 to January 2024)

Figure 7 shows the population living in areas at risk of experiencing a deterioration in food security into IPC 4+ between January 2014 and January 2024. IPC data of the population in IPC 4+ has been overlaid with the JMR data to show similarities between the population estimated to be at risk from JMR and IPC figures.

**Figure 7.** Population in areas at risk of experiencing a deterioration in food and nutrition security into IPC 4+ (Jan 2014 to Jan 2024)



# YEMEN JOINT MONITORING REPORT

BIMONTHLY UPDATE ON FOOD AND NUTRITION SECURITY CRISIS RISKS

MARCH 2024 - REPORT #2

## ABOUT THIS REPORT

The JMR combines quantitative modeling and qualitative analysis to provide robust bimonthly food and nutrition security monitoring to identify emerging food and nutrition security crisis risks. The report aims to complement Integrated Food Security Phase Classification (IPC) analyses and facilitate early recognition and coordinated responses to emerging major food and nutrition security crises among humanitarian and development partners. The JMR is produced by a core development team consisting of members from ACAPS, FAO, UNICEF, WFP, WHO, and the World Bank.

A detailed explanation of how the model is built is available in the JMR implementation note and academic paper. These documents are currently going through a peer review process and will be published in Spring 2024. The addition of further nutrition analysis is planned for future iterations of the JMR.

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