This report is an update to the targeted analysis of acute food insecurity in the Gaza Strip produced by the FEWS NET Early Warning Team on December 21, 2023, in response to the conflict in Gaza. FEWS NET does not have a presence in Gaza and does not apply its standard methods for monitoring and projecting acute food insecurity in Gaza in the same manner as in FEWS NET’s established reporting countries. As such, this IPC-compatible analysis of acute food insecurity in Gaza is based on available data and information from secondary sources, including key informants and local organizations.

Famine (IPC Phase 5) is imminent in northern Gaza, likely by May

Key Messages

- In February, Emergency (IPC Phase 4) outcomes were ongoing across all governorates of the Gaza Strip, with a large share of households facing Catastrophic (IPC Phase 5) food consumption gaps, especially in northern Gaza and Khan Younis. Food assistance delivered in January and February 2024 could only cover the full kilocalorie (kcal) needs of approximately 49 percent of the entire Gazan population; in the north, where access constraints have largely prevented aid delivery, food assistance covered only 314 kcals (15 percent) of the population’s daily survival needs. Available data showed a nearly 20-fold increase in Global Acute Malnutrition (GAM) by Mid-Upper Arm Circumference (MUAC) in northern Gaza (15.6 MUAC-for-Age) in January and a 35-fold increase in February (29.25 percent), indicative of Critical or Extremely Critical levels.

- In northern Gaza, Famine (IPC Phase 5) with reasonable evidence1 is projected from March to July, with expectations that it will imminentely emerge by May. Ongoing efforts to enable land, air, and sea deliveries are desperately needed but are occurring too slowly and in insufficient quantities to prevent Famine (IPC Phase 5). Based on the sustained severity of hunger and rising disease incidence amid the destruction of water, sanitation, and hygiene infrastructure, acute malnutrition levels will rapidly worsen, imminently exceeding the Extremely Critical (GAM by MUAC≥15) threshold if it has not been breached already. The lack of available malnutrition and medical treatment services, as well as empirical evidence from other famines, provide confidence that a rapid increase in hunger-related mortality that reaches the Famine threshold will quickly follow.

- In southern Gaza (Deir al Balah, Khan Younis, and Rafah), Emergency (IPC Phase 4) outcomes are expected to persist through July, with a large share of the population facing Catastrophic (IPC Phase 5) food consumption gaps. The availability of food and health services are higher in the south than in the north, leading to a less severe increase in acute malnutrition by early 2024. However, access to food is expected to deteriorate further in the south, given impending plans for a ground operation in Rafah. These classifications reflect a protracted, severe situation in which rising acute malnutrition is expected to lead to hunger-related mortality, albeit at a slower pace that is unlikely to result in Famine (IPC Phase 5) within this timeframe.

- Khan Younis faces a Risk of Famine (IPC Phase 5) during the forecast period.2 By February, GAM by MUAC already breached Serious or Critical (GAM by MUAC 10-14.99 percent) levels. Based on the projected trajectory of conflict and confinement, acute malnutrition levels are expected to accelerate further. While it is not considered the most likely scenario, if mobility is further restricted during conflict escalation, reducing populations’ access to available food assistance and remaining healthcare, FEWS NET anticipates Famine (IPC Phase 5) would occur in Khan Younis.

- Immediate humanitarian interventions prioritizing food, health, nutrition, WASH, and shelter are required to prevent a large loss of life due to starvation, acute malnutrition, and disease outbreaks. Humanitarian assistance at the scale required across Gaza is not feasible in the absence of a ceasefire. Diplomatic intervention is urgently needed to broker a lasting ceasefire and halt the imminent ground invasion of Rafah – which houses the world’s densest concentration of displaced populations. Famine (IPC Phase 5) will mark a failure of the international community to adequately respond.

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1 Famine (IPC Phase 5) is declared when: 1) 20 percent or more of the area’s population have highly inadequate food consumption (kilocalorie deficits ≥50 percent); 2) the share of acute malnourished children aged 6-59 months rises to 15 percent or more based on Middle Upper Arm Circumference or 30 percent or more based on Weight-for-Height Z-score; and 3) the Crude Death Rate reaches 2 or more deaths per 10,000 people per day.

2 FEWS NET acknowledges the Famine Review Committee identified factors driving a risk of Famine (IPC Phase 5) across the south. Please see page 23.
Analysis in Brief: Famine (IPC Phase 5) is imminent in northern Gaza, likely by May

Top-line messages

- **Famine (IPC Phase 5) is imminent in northern Gaza and likely to occur by May 2024.** The expected emergence of hunger-related deaths in line with internationally recognized thresholds for Famine is a further deterioration from the already widespread Emergency (IPC Phase 4) outcomes marked by high levels of acute malnutrition and hunger-related mortality.

- In southern Gaza, levels of acute food insecurity exceed the severity needed to merit urgent intervention. Food assistance is likely mitigating the severity of food consumption gaps in Deir al Balah, Rafah, and non-confined areas of Khan Younis, but the size of the population in need and depth of deficits mean most populations will still be in Emergency (IPC Phase 4) or Catastrophe (IPC Phase 5) through July. **In a less likely scenario, Famine (IPC Phase 5) could also occur in Khan Younis.**

- An immediate cessation of hostilities alongside a large-scale, multi-sectoral response with uninhibited access to populations in need is required to prevent widespread loss of life. The humanitarian community must not await confirmation of Famine before scaling up efforts to save lives. This delay would sacrifice the remaining opportunity to prevent further increases in acute malnutrition and loss of life.

The strong case for Famine in northern Gaza

Many people in northern Gaza are facing prolonged exposure to food consumption gaps exceeding 50 percent of their minimum survival kilocalorie needs. These gaps are corroborated by household-level surveys of food consumption; livelihoods-based analysis of key sources of food and cash income; and an abundance of supporting evidence, all in the context of conflict that is driving severe and persistent restrictions on commercial and humanitarian supplies of food, widespread destruction of essential infrastructure, and civil disorder. Over the past five months, there has been an over 35-fold increase in acute malnutrition in the north. Hunger, the spread of disease due to lack of clean water and poor sanitation, and the two in combination are now leading to mortality. During the first five months of conflict, the severity of rising acute malnutrition was likely moderated by a pre-conflict context in which levels of wasting were low; the prevalence of overweight children was elevated, and routine vaccination was high. As these protections have now been eroded, acute malnutrition prevalence is expected to rapidly worsen. Hunger-related mortality is rising, and further death due to dehydration from acute watery diarrhea, acute respiratory diseases, neonatal and maternal health complications, and the accelerating and exponential relationship between acute malnutrition and disease will likely drive mortality beyond the thresholds used to define Famine (IPC Phase 5).

FEWS NET’s analysis, the IPC Process, and the Famine Review Committee

FEWS NET is a USAID-funded activity that produces independent early warning analysis of acute food insecurity with the objective of preventing famine and mitigating acute food insecurity. FEWS NET also engages in the Integrated Food Security Phase Classification (IPC)’s consensus-based analyses. FEWS NET participated in the March 2024 IPC analysis for Gaza and agrees with the conclusions. The Famine Review Committee (FRC) is a six-member team of independent international food security and nutrition experts. A review by the FRC is required for a classification of Famine. The FRC’s validation of this classification is detailed in their report here.

Evidence available for this analysis:

Three rounds of World Food Programme (WFP) Computer Assisted Telephone Survey (CATI) household survey data (two rounds in December and one in February); Global Nutrition Cluster facility-based and community Mid-Upper Arm Circumference (MUAC) survey data on Global Acute Malnutrition (GAM); London School of Hygiene & Tropical Medicine (LSHTM) mortality projections; damage analysis of Copernicus Sentinel-1 satellite data by Corey Scher (CUNY) and Jamon Van Den Hoek (OSU); United Nations Satellite Centre (UNOSAT) and Food and Agriculture Organization (FAO) satellite imagery analysis of agricultural land and asset destruction; United Nations Relief and Works Agency (UNRWA) manifest data for all commercial and humanitarian truck entries; Food Security Cluster partner aid distribution and ration composition data; daily United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and partner reports; WFP and Palestinian Central Bureau of Statistics (PCBS) price data as well as market monitoring; Health Cluster epidemiological case tracking and health facility reporting; FEWS NET humanitarian aid assistance and health facility damage analyses, and Household Economy Analysis (HEA) Outcome Analysis (OA); World Bank and International Labor Organization (ILO) labor market assessments; and OCHA and UNRWA population movement data.
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Current food security conditions as of February 2024

Status of the conflict

As of February, the war in the Gaza Strip was marked by the continuation of large-scale ground operations in northern Gaza and southern Gaza, with the beginning of frontline expansions into Rafah. Up to 85 percent of the Gazan population (1.9 million people) has been displaced in at least 130 recorded displacement events (Figure 1). Nearly 55 percent of buildings across the Gaza Strip have been destroyed as of February 26, 2024 (OSU/CUNY), limiting infrastructure for housing, essential services, markets, and human movement. While Israeli fuel allowances for Gaza have increased since December, restrictions on border crossings have continued to result in widespread fuel shortages. Fuel shortages and mounting damage to power infrastructure (including at least 57 percent of electricity feeder lines) have resulted in electrical outages that impede medical services, telecommunications (which directly impacts access to cash and remittances and humanitarian response logistics), wheat milling for flour supply, and the storage of perishable food items. The remaining water infrastructure can only supply 6 percent of the typical production capacity in Gaza; as a result, household access to clean water is limited to less than 1-2 liters/person/day (l/p/d), which is less than 13 percent of the SPHERE minimum safe water requirement of 15 l/p/d. These amounts are far below the threshold that the IPC associates with a food security emergency (7.5 l/p/d), and even below threshold for a food security catastrophe (3 l/p/d).

Conflict across Gaza has resulted in the collapse of health systems, with 55-70 percent of hospital infrastructure no longer functional. The number of remaining hospitals across the Strip remains in flux, ranging from 11 to 16 (of the 36 active hospitals before the conflict) that provide at least partial services. These remaining hospitals are operating at over three times their capacity – and some at nearly 420 percent – amidst critical shortages of supplies. Based on FEWS NET’s analysis of reported strikes, approximately two-thirds of the remaining hospital facilities have been directly targeted during the conflict and the majority are in the middle of active evacuation areas. Understaffed facilities subject to regular evacuations must prioritize trauma surgeries and life-saving services; under this strain, they are often unable to provide palliative care including required neonatal care, therapeutic feeding, and treatment of malnourished children (Figures 2 and 3).

Since FEWS NET’s last report in December, the conflict has evolved with some key variations across the Strip. Northern Gaza (Gaza and North Gaza governorates) observed some limited de-escalation of conflict with the partial withdrawal and rotation of the Israel Defense Forces (IDF). Targeted operations and raids across the north continued, albeit at a lower intensity than in the first phase of the conflict. With the re-emergence of Hamas in Gaza City, the north has remained a key frontline. Some limited humanitarian access has been possible, though it has been sporadic and largely restricted to North Gaza, with no direct aid inflows to northern Gaza possible prior to March. Aid for the north continued to enter via the southern Rafah crossing, passing through rigorous IDF checkpoints before crossing north of Wadi Gaza; more than 50 percent of attempted aid missions were denied entry to northern Gaza from the start of 2024 through mid-February. A separate land border crossing into northern Gaza was only recently opened in early March.

The conflict in middle Gaza (Deir al Balah governorate) has continued to focus less on mechanized and heavily armored operations and more on engineered destruction and special forces operations. This modified approach has increased infrastructure destruction – further physically isolating this area – but temporarily reduced civilian casualties. The conflict has largely not spread to Deir al Balah city, allowing for some service and market continuation. As a result, humanitarian access has slightly improved compared to late December; however, access remains volatile, dictated by the security dynamics and changing

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3 Middle Gaza is the northernmost governorate in southern Gaza. While it is often discussed more generally as “southern Gaza”, when distinguishing how the conflict has impacted this area differently than other parts of southern Gaza, it is referred to as middle Gaza.
frontlines that prevent humanitarian actors from working in or traveling to conflict-affected IDP camps for prolonged periods.

Conflict dynamics have most substantially evolved further south in southern Gaza (Khan Younis and Rafah governorates). Numerous evacuation orders were issued across southern Gaza in January and February, with operations focused primarily on Khan Younis where damage has increased markedly: over 50 percent of infrastructure was damaged by February, compared to just 20 percent in November (OSU/CUNY, February 26, 2024). While there has been no significant change in IDF troop presence in Khan Younis since December, intensified air raids began in Rafah on February 5 in preparation for a larger-scale invasion over the coming weeks. As a result, Rafah has seen a rapid increase (over 900 percent since January) in infrastructure damage, with assessed civilian building damage now nearing 30 percent (OSU/CUNY, February 26, 2024).

Amid unpredictable evacuation orders and evolving frontlines, populations that remain outside of Rafah have endured cyclical displacements. Meanwhile, the majority of IDPs continued to concentrate in Rafah, placing extreme stress on limited local resources and leading to the destruction of arable land and a heightened risk of disease spread. Rafah is now the densest displacement camp in the world with over one million IDPs concentrated in 65km², resulting in a population density of 0.065m² per person. This is nearly 20 times as dense as Cox’s Bazar, and well above the recommended camp standards of 45m² per person. A small number of IDPs have fled back to the north since the onset of escalated hostilities in Rafah under the expectation that the Egyptian border will remain closed to refugees. In the absence of a clear evacuation plan and the ability for aid actors to reach the north more readily, however, IDPs have largely remained in Rafah.

**Figure 2** Impact of conflict on Gazan health systems (infrastructure damage versus health facility damage)

**Figure 3** Impact of evacuation orders on cyclical displacement (population size versus active evacuation orders)

Source: FEWS NET analysis using Oregon State University (OSU)/City University of New York (CUNY) damage satellite data

Source: FEWS NET analysis using ISW evacuation order data
Status of market functionality

Market supplies of essential commodities remain significantly constrained because of intermittent commercial cargo and the difficulty moving humanitarian aid convoys across Gaza. Although commercial cargo has been allowed to enter into Gaza since December 19, the number of commercial trucks remains very limited and subject to abrupt halts for days at a time. As of March 1, less than 800 commercial trucks had been allowed into Gaza since the start of the conflict, comprising only around 7 percent of food supplies entering the Strip. Given pervasive market access challenges and market food shortages, it is highly likely that inventory has been exhausted in the north and any remaining supplies are concentrated in the south. The halting of wheat flour shipment transfers to the Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) on February 13, combined with the regular blockage of key crossing points by Israeli protestors (which started on January 24), will further limit the market supply of essential commodities. The distribution of limited available supplies to the few remaining operational shops is also significantly constrained by poor road conditions in the north, road blockages in the south, and insecurity. The Gaza Consumer Price Index (CPI) has risen by nearly 70 percent since the crisis onset (from 107 in September 2023 to 178 in January 2024); price increases are expected to be significantly higher – further depressing purchasing power – in areas where formal markets have largely collapsed and consumers rely on volatile black markets where pricing is not reflected in official figures (Figure 4). Some food supplies may be brought in via the tunnel network, but that quantity has been insufficient to ameliorate informal and formal market stocks or prices. Given the volatility of imported supply flows, internal distribution challenges, and resultant price hikes, formal markets no longer constitute a primary source of food for Gazan households, especially in besieged areas of northern Gaza, Deir al Balah, and Khan Younis, where market functionality and access are more limited.

Figure 4  Consumer Price Index (CPI) in Gaza, pre (1-year and 5-year averages) and post (October 2023-January 2024) crisis

![Consumer Price Index (CPI) in Gaza, pre (1-year and 5-year averages) and post (October 2023-January 2024) crisis](image)

Even as market supplies remain very low overall, market functionality and household access to markets still vary significantly across the Strip (Table 1), with significant impacts on food availability and access. In northern Gaza, formal market functionality remains negligible: 0 percent of shops were open in North Gaza and only up to 11 percent were open in Gaza City by January. Informal markets were reportedly still partially active, supplied by individually resold portions of humanitarian assistance, looted goods and assistance, small local vegetable harvests from the preceding season, and limited local fish supplies. Given scarcity of supplies and black market pricing, prices for key staples on the informal market are exorbitant. Ground reports indicate a bag of wheat flour could be sold at up to 600 shekels (~164 USD) (a 12,000 percent increase), while a kilogram (kg) of rice could be sold for 17 shekels (~4.64 USD) or more (>200 percent increase). As a result of supply chain, security, physical, and financial barriers, purchasing food through markets is highly constrained for most northern Gazans.

In southern Gaza, formal market functionality is limited (in January, up to 50 percent of shops were operational in Deir al Balah, and nearly all were functional in Rafah) but with increasingly restricted supplies: all markets reported reduced food stocks and 81 percent reported they had entirely run out of food supplies. The distribution of supplies to the few remaining shops remained constrained by poor road conditions and insecurity. Staple food prices have risen substantially, based on WFP price monitoring and ground reports, though to a less extreme degree than in northern Gaza: 21 shekels (~5.74 USD) per kg of wheat flour (420 percent increase), 9.14 shekels (~2.50 USD) per kg of rice (114 percent increase), 25 shekels (~6.83 USD) per kg of sugar (500 percent increase), and 10 shekels (~2.73 USD) per kg of lentils (167 percent increase). Access to food through markets is heavily
constrained for southern Gazans living in conflict-affected areas outside of Rafah. Rafah data was collected prior to the intensification of air raids, which have likely further constricted the number of functional vendors.

In Khan Younis, specifically, humanitarian partners have reported a significant deterioration in market conditions since December, marked by the closure of the last remaining formal market vendors and increasing reliance on informal markets. Due to intensifying conflict in this governorate, especially in the urban Khan Younis center where pre-crisis markets were centralized, it is likely that the distribution of supplies to informal markets is very low. Consequently, it is understood that market functionality and staple food prices in Khan Younis increasingly resemble those of northern Gaza.

Table 1: Overview of functionality in each market basin

<table>
<thead>
<tr>
<th>Market Basin</th>
<th>Status</th>
<th>Change since December</th>
<th>Key Issues</th>
</tr>
</thead>
</table>
| Gaza City    | Collapsed | Same                  | • Formal markets have largely collapsed with households relying on the informal market  
• By December 2023, 0 percent of sampled shops in North Gaza and 11 percent in Gaza were operational  
• Most shopkeepers have moved south to Rafah  
• No commercial goods have been allowed into northern Gaza since the start of the conflict  
• The informal market is irregularly stocked with resold portions of humanitarian assistance, looted goods and food, and very limited local vegetable harvests  
• Less than 1 percent of all humanitarian assistance in Gaza is able to reach the north due to strict access requirements  
• Informal market food prices are significantly inflated compared to formal market prices (90-650 percent higher for key staples)  
• Over 70 percent of buildings are destroyed in Gaza City including a large share of shops, commercial and industrial buildings; Gaza City previously contained 46 percent of Gaza’s commercial infrastructure  
• Severe damage to road infrastructure preventing transportation of market goods  
• Communication services remain largely unavailable  
• High insecurity and lack of fuel limit the movement of people and goods to markets (even for informal supplies) |
| Khan Younis  | Severely disrupted to collapsing | Substantial deterioration | • By December 2023, 64 percent of sampled shops that were operational in Khan Younis; by February, partners reported formal markets had largely collapsed with households relying primarily on the informal market  
• Insecurity has increased significantly, with active evacuation orders across most of the governorate  
• By February, over 50 percent of structures had been damaged (a substantial increase from 20 percent in December) including a substantial share of shops, commercial and industrial buildings  
• Increased intensity of fighting has led to significant displacement of customers and traders further south into Rafah  
• Severe damage to road infrastructure preventing transportation of market goods  
• Communication services remain largely unavailable  
• Informal markets are primarily supplied by resold humanitarian food assistance and looted goods and food  
• Market supply is highly unstable even though some food supplies (commercial and humanitarian assistance) from Rafah are reaching this area  
• High insecurity, road damage, and lack of fuel limit the movement of people and goods |
| Deir al Balah | Severely disrupted | Moderate deterioration | • By December 2023, 50 percent of sampled shops in Deir-Al Balah were operational; by February, partners reported some formal market activity had persisted  
• Insecurity has increased significantly but has largely been outside Deir al Balah town with evacuation orders concentrated in the eastern part of the governorate  
• By mid-February, over 40 percent of structures had been damaged (a substantial increase from 12 percent in January), including a large share of shops, commercial and industrial buildings |
**Household income sources**

**Employment across Gaza is only 15 percent** of the prewar period, with gross domestic production (GDP) contraction across the Strip exceeding **80 percent**. Gazan labor migration to Israel, a key source of remittances, ceased after October 7 when the **work permits for 20,000 Gazans** were revoked. While there is no available data to support disaggregation between governorates, the impact of employment shortages is assumed to be more severe in northern Gaza and Khan Younis given the dysfunction of markets in these besieged areas. According to the Gaza Cash Working Group (CwG), **wages for both casual unskilled and skilled labor have remained unchanged** since 2012. Yet, the consumer price index (CPI) has increased substantially (**66 percent** comparing September 2023 and January 2024) since the start of the conflict. As a result, purchasing power across the Strip has substantially contracted.

Humanitarian cash assistance and remittance flows – including from countries aside from Israel – are two key sources of income that likely vary more substantially across the Strip. In **northern Gaza**, no ATMs are reportedly functional, electricity as well as connectivity are negligible, and markets have largely collapsed; according to the CwG, cash assistance was limited through December and ceased after January when the last remaining financial service provider was displaced to the south. Therefore, cash assistance does not currently contribute to household income. Credit, loans, and remittances are similarly unavailable or inaccessible to households in the north.

In **southern Gaza**, the majority of the population has not received cash assistance. Humanitarian cash assistance has reportedly reached **36 percent of the population** (IDPs and host communities) at least once since the onset of conflict in October. Between **30 to 40 percent** of Gazans have lost their identity documents during the conflict and ensuing displacement; while lack of documentation typically limits household access to financial assistance, the CwG has worked closely with available financial service providers to support IDP populations’ continued access to cash assistance. However, even assuming most partners transferred the highest end of the range of the CwG-recommended transfer value (**1,659 shekels per household**), this transfer package only covers the cost of the most essential survival goods for one month, such as food, water, and shelter (known as the Survival Minimum Expenditure Basket). Equally, redemption possibilities for both humanitarian cash assistance and remittance inflows are likely increasingly difficult given more prolonged power cuts and fuel shortages that impact ATM functionality and mobile connectivity, coupled with challenges in quickly relocating cash stocks to areas where large populations are on the move, especially in Rafah. Further, populations dependent on informal markets – such as in Khan Younis – pay premiums for food and non-food items, limiting the effectiveness of transfers based on formal market prices. The scale of remittance flow remains a key area of uncertainty given the lack of available monitoring data, though ground reports suggest it is not a large share of current income.

<table>
<thead>
<tr>
<th>Gaza Strip Targeted Analysis</th>
<th>March 18, 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td><strong>Non-especi</strong></td>
</tr>
<tr>
<td><strong>Survival Minimum Expenditure Basket</strong></td>
<td><strong>is not</strong></td>
</tr>
<tr>
<td><strong>package only covers the cost of the most essential survival goods for one month, such as food, water, and shelter (known as the Survival Minimum Expenditure Basket).</strong></td>
<td></td>
</tr>
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<td></td>
</tr>
</tbody>
</table>
Local food production

As of February, ground reports suggest local food production was a key source of income for only a small share of the population (approximately 2 percent or under 55,000 people) living in the Semi-Agricultural (SAG) Livelihood Zone (LHZ) across the Strip during this period. However, production capacity has not been large enough to significantly change food availability in either the SAG or Urban (URB) LHZZ, given both historic trends (Table 2) and reported damage to assets and land since the war began.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated population</th>
<th>Estimated wheat requirement per year (MT)</th>
<th>Estimated Gazan wheat production</th>
<th>Estimated deficit (imported)</th>
<th>Estimated percent imported</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,932,843</td>
<td>225,756</td>
<td>8,302</td>
<td>217,454</td>
<td>96%</td>
</tr>
<tr>
<td>2019</td>
<td>1,989,970</td>
<td>232,428</td>
<td>4,131</td>
<td>228,297</td>
<td>98%</td>
</tr>
<tr>
<td>2020</td>
<td>2,047,969</td>
<td>239,203</td>
<td>4,127</td>
<td>235,076</td>
<td>98%</td>
</tr>
<tr>
<td>2021</td>
<td>2,106,745</td>
<td>246,068</td>
<td>2,364</td>
<td>243,704</td>
<td>99%</td>
</tr>
<tr>
<td>2022</td>
<td>2,166,269</td>
<td>253,020</td>
<td>3,938</td>
<td>249,082</td>
<td>98%</td>
</tr>
<tr>
<td>5-year average</td>
<td>N/A</td>
<td>239,295</td>
<td>4,572</td>
<td>234,723</td>
<td>98%</td>
</tr>
</tbody>
</table>

Source: FEWS NET calculations using PCBS population and EMMA consumption data

While limited overall, there has been high variability in income from the local production of key agricultural and livestock goods within Gaza. In northern Gaza, households in the SAG LHZ were only able to generate typical income from harvests up until October 7, when hostilities escalated, and blockades were imposed that prevented access to most agricultural land. By January, 44 percent of farmland in northern Gaza was destroyed, and most farmland was reportedly inaccessible during key cultivation periods. While some very small-scale harvests and sales at local markets were reported, this represents a small fraction of typical cabbage, wheat, tomato, and chili production (for which harvesting occurs in autumn and winter). Harvesting was also limited by looting and premature consumption of crops. In 2024, no new planting has occurred as partners report households have largely resorted to consuming remaining seeds. Semi-rural households have reportedly abandoned livestock when fleeing to other areas across the north or to the south; as a source of food some households are now resorting to consuming remaining animal feed. It is likely that some small-scale fishing activities have been possible with the reported Israeli re-opening of fishing within 6 nautical miles of the shore; however, few of the 4,000 Gazans registered to fish before the crisis will have the fuel or assets to do so given extensive damage to fishing boats during the war.

In southern Gaza, relatively more substantial harvests – though still with significantly below-average production volumes – may have been possible, particularly in Deir al Balah and Rafah, prior to the escalation of conflict across the south. These households likely generated some income from the chili and cabbage harvests leading up to February, with inflated informal retail food prices helping to improve their purchasing power compared to households from other areas or LHZZs. However, the olive harvest largely failed, meaning that agricultural labor demand was non-existent and likely did not provide any income to typically labor-dependent poor households. Therefore, an even smaller proportion of the already small semi-rural population in southern Gaza benefited from agriculture than is typical. Furthermore, income from agriculture has likely continued to substantially decline in the latter part of the winter harvest season, corresponding to a significant increase in damage to agricultural land, especially in Deir al Balah and Khan Younis (56 and 21 percent of arable land, respectively). Finally, planting for the upcoming cultivation period is also limited, based on the Food Security Cluster reports that Israel has banned the entry of key inputs (seeds, fertilizers, tools) at all Gazan border crossings.

4 In the absence of updated population figures by district for both IDPs and host community members, FEWS NET analyzed the likely population distribution using population forecasts from PCBS and available data from OCHA and other news sources.

5 The US International Trade Administration reported that over 90 percent of Gazan and West Bank market supplies (food and non-food items) were supplied by imports, which were by far the most significant source of food for Gazans prior to October 7, 2023. The agricultural sector in Gaza has played a minor role in the territory’s economy in recent years, comprising less than 8 percent of overall economic activity. Local production was not a primary food or income source for over 90 percent of the population in urban areas and was only a modest share of food sources among the remaining share of the population. As a notable example, FEWS NET estimates around 98 percent of wheat consumed in Gaza is imported. This aligns with a recent report that only 2 percent of consumption is covered by local wheat production.
Meanwhile, livestock-rearing households in the south utilized this typical source of income to cope with food consumption deficits earlier in the conflict. Households reportedly slaughtered most livestock. Food stocks to sustain any remaining live animals are limited given human consumption of wild foods typically eaten by grazing animals during the winter season, and reports from the Food Security Cluster that Israel has banned animal fodder entry at all Gazan border crossings. At this time, the body conditions of remaining livestock are likely too poor for sale.

**Humanitarian food assistance**

Prior to the conflict, Gazans were heavily dependent on humanitarian aid – with over 75 percent of the population receiving food assistance – due to high levels of structural poverty (60 percent), widespread unemployment (exceeding 45 percent), and low wages limiting the ability of households to save. As a result, Gazans across wealth groups and LHZs had less diversity in food and income sources, relying primarily on food assistance and market purchases. Continued volatility of food aid delivery, paired with market dysfunction, has therefore devastated food availability across the Strip.

Based on manifest analysis from October 21 to March 3, an average of approximately 89 trucks/day entered Gaza carrying 1.8 billion kilocalories worth of food items, sufficient to meet the minimum kilocalorie needs of 836,900 people (38 percent of the total Gazan population); since January 2024, this has increased to an average of 91 trucks/day carrying sufficient kilocalories for 1.09 million people (49 percent of the total Gazan population) (Figure 5). It is important to emphasize that the availability of these kilocalories did not equate to regular access to assistance. Food assistance is unable to be distributed effectively to those with the highest level of need due to pervasive security and access restrictions, especially in the north and besieged areas of Khan Younis. Overall, while the scale of food assistance is significant, the depth of household kilocalorie deficits, size of the population in need, and uneven distribution of assistance within the Strip are blunting the impact of aid.

*Figure 5* **Kilocalories (kcal) entering Gaza each day and in 7-day rolling averages from commercial and humanitarian sources versus minimum kcal needed, October 21, 2023 – March 3, 2024**

Source: FEWS NET analysis of kcal contained in commercial and humanitarian trucks based on UNRWA manifest data, as of March 3

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6 FEWS NET downloaded the UNRWA dataset covering all truck entries into Gaza from October 21, 2023, to March 3, 2023. This dataset included detailed manifests with information on the quantity and type of items being transported. FEWS NET isolated food-related items in all manifests from all trucks during this period. FEWS NET calculated kilocalories for up to eight different kinds of food items transported in trucks based on manifest analysis and cross-referencing with a kilocalories table developed in collaboration with the IPC Global Support Unit (GSU) and the oPT Food Security Cluster, which provided kilocalorie values per kilogram for various food items. Given the known standard weight of a pallet (637.5 kg), our analysis was narrowed to items transported in pallets. This decision allowed for straightforward calculation of total weights and corresponding kilocalories. Excluding trucks that were not allowed to enter, for each qualifying truck, FEWS NET estimated total kilocalories per truck by dividing the truck’s total weight by the number of items to achieve an even distribution, then multiplying by the kilocalorie values for each food item. FEWS NET then aggregated the kilocalorie totals for all trucks daily to determine total kilocalorie availability. Finally, utilizing most recent demographic data, FEWS NET then calculated Gaza’s daily kilocalorie needs with consideration of variations by age and gender to determine the share of kilocalorie requirements covered by available food.
In northern Gaza specifically, FEWS NET’s analysis of Food Security Cluster distribution data indicates humanitarian food assistance only provided approximately 314 kilocalories (15 percent of minimum requirements) per person per day in northern Gaza from January 1 to February 25\(^7\) (Figure 6). All but one of these distributions were to North Gaza governorate, leaving food needs in Gaza governorate largely unmet. Persistent administrative issues crossing the Kerem Shalom, Rafah, and Wadi Gaza crossing points, as well as evolving frontlines including security threats to convoy movements, continue to limit the operating environment in the north. As a result, operational challenges affecting distribution management have prevented effective aid targeting: partners report that over 90 percent of assistance has not reached targeted distribution sites as convoys have reportedly been stopped or looted en route by desperate civilians. As a result, humanitarian food assistance has remained highly volatile, and – given widespread sharing of already limited assistance as reported by WFP’s February assessment – contributed only marginally to minimum food needs.

In Rafah and Khan Younis, food assistance is estimated to meet nearly 56 percent (1,168 kilocalories) and 93 percent (1,948 kilocalories), respectively, of daily minimum food needs for IDPs and host communities (Figure 6). While the availability of food assistance is relatively better in Khan Younis, access to distributed food is significantly more limited compared to Rafah, given the spread of conflict and evacuation orders, which prevents households from accessing the limited number of distribution sites.

In Deir al Balah, humanitarian food assistance availability is proportionally higher than the rest of the Strip, reportedly enough to cover up to 219 percent (4,597 kilocalories) of food needs daily (Figure 6). In addition to rations intended for Deir al Balah residents, the governorate received substantial food aid that was originally destined for northern Gaza but was denied at the Wadi Gaza border crossing. This food aid was likely given as additional rations to households and to market vendors to support market stock prepositioning; due to food storage and cooking challenges, most households that received assistance in excess of what they could immediately consume resorted to reselling food aid to informal markets. For camp-based populations who faced periodic conflict-related confinement, household access to food assistance hinged more heavily on a household’s capacity to purchase food. As a result, access to assistance was likely less needs-based, instead disproportionately benefiting out-of-camp and urban-dwelling Deir al Balah residents who face less confinement from conflict.

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\(^7\) FEWS NET calculated kilocalorie coverage by governorate using beneficiary distribution data disaggregated by partner, aid type (i.e., ration or ready-to-eat meal), and distribution location collected by the Food Security Cluster for 7 of the 8 weeks from January 1 to February 25. Data from the week of February 12-18 was not available. Because WFP CATI data collected in February showed high levels of sharing of food aid among the north Gazan population, the analysis was based on total kilocalories distributed across the population remaining in north Gaza (total kilocalories per total people targeted with aid type), rather than by estimating a number of direct beneficiaries; in other words, the calculation assumes aid-sharing has resulted in nearly 100 percent of the population being able to access some portion of aid. Week-on-week changes in the amount of aid distributed per location were small, so the absence of one week of data was unlikely to significantly change the analysis; however, overall kcals distributed per week did vary, so the percent approach was elected to best represent available data. While this analysis does not reflect air-dropped food assistance, FEWS NET assesses that air-dropped food comprises a negligible share of humanitarian food assistance in Gaza compared to what is trucked overland.
With the ongoing investigation into the UNRWA – the largest aid actor in Gaza – the biggest humanitarian donors have withdrawn funding from the agency. UNRWA reportedly had sufficient funding reserves to sustain current levels of humanitarian assistance only through the end of February, with funding shifts unlikely to change food aid distribution levels until March.

Current acute food insecurity outcomes as of February 2024
FEWS NET assesses that up to 100 percent of Gaza’s population is experiencing Crisis (IPC Phase 3) or worse acute food insecurity outcomes, and urgent humanitarian food assistance is needed across the Gaza Strip to save lives. According to livelihood-based analysis of food consumption deficits conducted by FEWS NET in February; household survey data collected by WFP in December and February on food consumption; and proxy acute malnutrition data collected in January and February by Global Nutrition Cluster partners indicate that northern and southern Gaza are likely facing Emergency (IPC Phase 4) outcomes at the governorate level. In northern Gaza and Khan Younis, there is likely a high share of households facing Catastrophe (IPC Phase 5) outcomes. In addition to humanitarian food assistance, a multi-sectoral response to address immediate nutrition and water, sanitation, and hygiene (WASH) needs, and unfettered access to provide this aid, is required to save lives.

The groups of highest concern include populations remaining in besieged areas of northern Gaza and Khan Younis. Adult women and populations with specific protection needs (child-headed households, widows, persons with disabilities) are groups of high concern given mounting social (including intra-family) and physical barriers preventing access to limited available food.

Available evidence on food consumption
Convergence of food consumption data highlights that kilocalorie deficits are extreme and widespread. In February, FEWS NET conducted a Household Economy Approach (HEA) Outcome Analysis (OA)8 for the Gaza, North Gaza, and Rafah URB and SAG LHZs; baseline data were not available for either Khan Younis or Deir al Balah. This analysis suggests large survival deficits in excess of 20 percent across all wealth groups in three out of four livelihood zones. In northern Gaza, survival deficits were most severe at 50 percent or higher – which is indicative of Catastrophe (IPC Phase 5) – for approximately 99.6 percent of households. In Rafah, food consumption gaps were less severe and indicative of Emergency (IPC Phase 4) for nearly the entire IDP and host population (97 percent), attributed to comparatively better access to food aid than other areas and relatively less disruption to market functionality (Figure 7, next page).

While no baseline data exist to perform an HEA outcome analysis for Deir al Balah and Khan Younis, Oxfam categorized all governorates of Gaza within the two LHZs (Figure 8). Therefore, baseline conditions in Deir al Balah (described as middle Gaza in Figure 8) and Khan Younis were comparable to those from governorates that were more deeply assessed.

Currently, FEWS NET assesses that market prices, destruction of livelihoods, and food assistance conditions in both LHZs of Khan Younis are more comparable to those in northern Gaza, given the besiegement of the urban center of Khan Younis, though it is important to note that the besiegement of these areas of Khan Younis began later on in the conflict. Therefore, FEWS NET reasonably infers that the size of food consumption deficits in Khan Younis are currently 50 percent or higher, but the population has sustained those deficits for a shorter period than in the north. Conversely, FEWS NET anticipates conditions in both LHZs of

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8 FEWS NET conducted a HEA Outcome Analysis (OA) covering Gaza and the impacts of changes to livelihoods and food since the start of this conflict, compared to the Oxfam Gaza HEA baseline analysis conducted for a “typical” year in Gaza before the conflict (November 2011-October 2012). The HEA methodology breaks down populations by livelihood zone and wealth groups during “typical” years to understand how people in different social and economic groups obtain the food and cash they need, what assets they may likely have, what opportunities and specific barriers they face, and the specific options they have to cope/adapt during times of crisis. The HEA OA calculates household capacity to meet needs without engaging in extreme coping. As FEWS NET anticipates extreme coping is ongoing in Gaza, actual consumption might differ to a degree from these results.
Deir al Balah to more closely resemble those in Rafah given the relative better availability of humanitarian food aid, functionality of markets, and mobility of people – reflecting restrictions but not confinement; therefore, FEWS NET reasonably assumes that similar food consumption deficits are likely in Deir al Balah as are assessed in Rafah.

<table>
<thead>
<tr>
<th>Area</th>
<th>Governorate</th>
<th>% of total Gaza population</th>
<th>Urban Livelihood Zone (URB LZ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Very Poor (24% of the LZ population), Indicative IPC Phase</td>
</tr>
<tr>
<td>Northern Gaza</td>
<td>North Gaza</td>
<td>5%</td>
<td>Survival deficit ≥ 50%, Phase 5</td>
</tr>
<tr>
<td></td>
<td>Gaza</td>
<td>5%</td>
<td>Survival deficit ≥ 50%, Phase 5</td>
</tr>
<tr>
<td>Southern Gaza</td>
<td>Deir al Balah (or middle Gaza)</td>
<td>10%</td>
<td>Survival deficit ≥ 20% but &lt; 50%, Phase 4</td>
</tr>
<tr>
<td></td>
<td>Khan Younis</td>
<td>21%</td>
<td>Survival deficit ≥ 20% but &lt; 50%, Phase 4</td>
</tr>
</tbody>
</table>

Source: FEWS NET analysis using HEA baseline data

Note: Deir al Balah and Khan Younis calculations are not included due to the absence of a baseline Livelihood Impact Analysis Spreadsheet (LIAS) tool for these two governorates, so livelihood outcomes from the crisis can only be inferred based on similarities in the context of deterioration compared to other assessed areas but cannot be quantified.
The HEA OA analysis results converge with the substantial food consumption gaps reported by households in WFP’s assessments in northern and southern Gaza. In northern Gaza, 36 percent of northern Gazans reported very severe hunger (December 2) that met the Household Hunger Scale (HHS) indicator threshold for Catastrophe (IPC Phase 5); based on WFP’s February 2024 follow-up assessment, levels of very severe hunger have more than doubled in northern Gaza in under two months. In southern Gaza, 55 percent of southern Gaza IDPs faced severe or very severe hunger based on the HHS indicator (December 16), indicative of Emergency (IPC Phase 4) or worse; reported levels of severe and very severe hunger continued to rise per the February assessment. In general, HHS and other food consumption indicators tended to be worse for Khan Younis and Deir al Balah than in Rafah, suggesting that despite better availability of food due to humanitarian food assistance, many households are unable to physically access distributed assistance and/or lack financial means to purchase assistance resold in markets after distributions.

The use of severe food consumption coping strategies across all groups is pervasive as households approach exhaustion or have already exhausted their coping capacity. Most Gazans have resorted to consumption of animal feed, slaughtering and consuming remaining livestock, cooking with unsafe fuel sources, eating only once per day, selling and consuming wild foods (mallow and khubeiza), eating seeds intended for planting, and risking physical safety to seek food during active combat. In northern Gaza, households additionally resorted to skipping all meals for multiple days, consuming carcasses, and looting. Based on WFP’s two assessments in December, 96 percent of surveyed IDPs in southern Gaza (December 14) and 95 percent of surveyed northern Gazans (December 2) reported utilizing high levels of food consumption-based coping mechanisms per the reduced Coping Strategies Index (rCSI) indicator. According to analysis of WFP December assessment data, during times of hunger, adult Gazan women were the first family members to eat less or skip meals.

The above quantitative evidence on food consumption is corroborated by qualitative observations on food security conditions as detailed earlier in this report. Food availability, access, and utilization are all severe limiting factors, with little difference in the severity of food consumption deficits between wealth groups. Negligible commercial imports have resulted in food shortages and left both markets and households nearly completely reliant on humanitarian aid; however, the availability of aid remains significantly below the population’s total minimum kilocalorie needs even before aid distribution challenges are taken into account. Remaining local production does not significantly contribute to local supply of food given generally low agricultural production capacity pre-crisis, combined with the significant loss of key agricultural lands and assets, which resulted in substantially reduced (southern Gaza) or non-existent (northern Gaza) harvests for the 2023/2024 production cycle.

Purchasing power for most Gazans has been severely depressed, limiting their financial access to food as prices have increased substantially across the Strip and their sources of income have become increasingly limited and remain sporadic. While access to cash from remittances and humanitarian assistance remain key sources of income for households in southern Gaza, access is highly irregular. Physical and security obstacles to reach markets and food aid distribution sites further restrict access to limited available food goods, especially in conflict-affected and mobility-confined areas of northern Gaza as well as Khan Younis.

Even when food items are available and accessible, many households struggle to effectively store and consume them. No shops reported access to electricity, complicating storage of non-shelf stable goods, especially frozen meats and vegetables (25 percent of market goods) and dairy products (2 percent of market goods). Crowded and damp shelter conditions during the winter rainy season have also prevented households from storing or stockpiling food items; three-month UNRWA wheat rations are reportedly too large to be stored in tents and become quickly infested with worms. In most cases, households resort to selling whatever portion of food they cannot immediately consume as a coping strategy to purchase food later. Finally, severe water and fuel shortages continued to limit households’ ability to prepare key staples such as lentils and wheat flour.

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9 WFP data respondent breakdowns per location were not specified beyond north/south divides, though respondents from Khan Younis and Deir al Balah were reportedly included.

10 The HHS assesses the frequency and severity of a household’s experience of hunger over a 30-day recall period preceding the day of the survey.

11 rCSI assesses adaptive mechanisms employed by households when they did not have enough food or money to purchase food. The indicator measures the frequency and severity of food consumption coping in the 7-day recall period prior to the survey.
Available evidence on acute malnutrition and mortality

In January 2024, the Nutrition Cluster conducted a nutrition assessment which included both telephone interviews on food and non-food factors affecting nutrition status (such as access to water and disease incidence) and acute malnutrition screenings based on Middle Upper Arm Circumference (MUAC). The Cluster was unable to conduct an acute malnutrition assessment in line with SMART standards – instead relying on partial acute malnutrition screening data from functional sites providing basic services – due to little to no humanitarian access and the lack of resources for partially functioning hospitals, many of which are in active evacuation zones, to conduct this type of assessment given that they are operating over capacity and can only prioritize trauma and life-saving interventions.

For the nutritional screening, the Cluster relied on MUAC data collected among children that received routine immunization services. In most cases, this data was collected only from children aged 6-23 months (MUAC-for-Age) that are in the age group that are typically immunized rather than among 6-59 months, as is the global standard (MUAC). Wasting is typically higher in children ages 6-23 months than among those 24-48 months old, so data collection emphasis on this population may result in an overestimation of acute malnutrition in children 6-59 months old more broadly. Yet, the survey design includes imputed response bias towards children with access to basic health services, resulting in a lack of representativeness of hard-to-reach, conflict-affected, and mobility-confined areas of Gaza. Consequently, it is likely that this data does not capture the full extent of deterioration in acute malnutrition levels.

In North Gaza governorate, the Nutrition Cluster assessment observed a proxy Global Acute Malnutrition (GAM) by MUAC-for-Age prevalence of 15.6 percent [CI: 13.9-17.5] among 1,539 children; a subsequent partner assessment of 1,323 children ages 6-23 months found the proxy GAM by MUAC-for-Age jumped to 29.25 percent [CI: 26.86-31.76] in February. While collected data does not precisely graft onto IPC classifications – given sampling of children 6-23 months old as opposed to 6-59 months old – data can still be considered as a proxy area-level prevalence that is broadly indicative of Critical or Extremely Critical (GAM by MUAC ≥15 percent) levels of malnutrition based on IPC thresholds. Although an imperfect comparison given different methodologies used, this suggests a mean estimate nearly 10 times higher than in November (3 percent) and over 35 times higher than the 2019/2020 baseline (0.8 percent). As in North Gaza, households in Gaza governorate live in a state of confinement and likely have similarly severe and protracted food consumption deficits, exhaustion of coping capacity, extreme clean water shortages, and very limited access to health services. In some cases, the conditions in Gaza governorate may tend to be worse given acute inaccessibility of the area to humanitarian actors, largely preventing food assistance coverage and access to healthcare facilities, which prevented the collection of anthropometric malnutrition data for this assessment. Due to comparable if not worse contributing factors, FEWS NET infers that Gaza governorate likely has a similar GAM by MUAC prevalence to that assessed in North Gaza. When considered alongside the severity of food consumption deficits, Critical or Extremely Critical levels of acute malnutrition not only provide confidence that Emergency (IPC Phase 4) outcomes are ongoing across northern Gaza, but also warrant alarm that the acute malnutrition threshold for Famine (IPC Phase 5) – the second of three requirements for a Famine (IPC Phase 5) classification – has likely been breached.

In Rafah, the Nutrition Cluster assessment found a proxy GAM by MUAC-for-Age prevalence of 4.8 percent [CI: 3.5-6.5] among 802 children, broadly indicative of Acceptable or Alert (GAM by MUAC <5 percent) as of January. By February, partner MUAC screening of 844 children found a GAM by MUAC (6-59 months) of 5.09 percent [CI: 3.8-6.8], increasingly indicative of Alert or Serious (GAM by MUAC 5-9.99 percent). February partner data from both Deir al Balah and Rafah among a sample of 221 children ages 6-23 months found a proxy GAM by MUAC-for-Age of 7.31 [CI: 4.55-11.54]. While not disaggregated by governorate, this is broadly indicative of Alert or Serious (GAM by MUAC 5-9.99 percent). Lower GAM by MUAC levels in both Rafah and Deir al Balah likely reflect comparatively higher mobility, access to humanitarian food assistance, somewhat functional

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12 Additional data from this assessment has been collected and shared by the Cluster as it has become available, though they were not reflected in the original published report.

13 Measurements of global acute malnutrition (GAM) using MUAC are easier to collect and often relied on in resource-scarce emergency settings, but these data have relatively lower reliability than GAM weight-for-height (WHZ) measurements. This is reflected in less precise thresholds endorsed by the IPC for acute food insecurity classification, with each MUAC level corresponding to a range of two IPC Phases while WHZ is associated with one Phase.

14 Data from this published Nutrition Assessment are indicated with the qualifier “proxy GAM by MUAC-for-Age” while other data sources – which are not yet published or public, but which meet IPC protocols more directly will be described simply as “GAM by MUAC”.

15 The February 2024 assessment used the MUAC data while the 2019/2020 data used Weight-for-Height (WFH) Z-scores, and the November projections were not specified but based on the 2019/2020 figures, so these are assumed to be using WFH as well.
markets, healthcare, and nutrition assistance for populations; food consumption gaps are likely smallest among these populations based on FEWS NET’s HEA OA. This is likely also a function of the lagging nature of malnutrition. Food availability and access only substantially deteriorated in Rafah and Deir al Balah after December with the expanded frontlines in the south; low baseline levels of wasting, high vaccination rates, and high overweight/obesity prevalences likely also mitigated steep deterioration of nutrition among children to date. Still, current levels suggest a 625 percent increase compared to in 2019/2020 (0.8 percent). As a result, the assessment of Emergency (IPC Phase 4) outcomes across Deir al Balah and Rafah is driven by the severity of food consumption deficits and engagement in severe livelihood coping strategies, leading to atypically high malnutrition rates that warrant high concern but do not reflect the same severity as northern Gaza.

In Khan Younis, subsequent February partner screening found a GAM by MUAC prevalence of 12.73 percent [CI: 9.52-16.84] among a sample of 322 children ages 6-59 months, indicative of Serious or Critical (GAM 10-14.99 percent). Steeper decline of nutritional status in Khan Younis compared with other areas of southern Gaza likely reflects the highly restricted mobility of population, which further limits access to food (even when it is available from aid), healthcare, and nutritional services as well as coping options, in addition to very limited access to clean water. Furthermore, pockets of Khan Younis have faced besiegement since October during more neighborhood-specific campaigns that began even prior to the escalations observed since December. Indicatively, this suggests a mean estimate four times higher in November (3 percent) and over 15 times higher than the 2019/2020 baseline (0.8 percent). Overall, levels of acute malnutrition in Khan Younis when coupled with food consumption deficits are broadly indicative of Emergency (IPC Phase 4); more severe deterioration was likely mitigated by concentrated but still overall high levels of humanitarian assistance including some access to health and nutritional services.

Data on non-trauma mortality could not be collected due to the collapsing health systems across Gaza and limitations on humanitarian access. Regardless, observations from other acute food insecurity emergencies provide empirical evidence of the progression from hunger to acute malnutrition to mortality, and it is highly likely that there is growing excess mortality from either hunger or the interaction of hunger and disease due to lack of treatment for Severe Acute Malnutrition (SAM) cases and comorbidity from infections, particularly as populations have weakened immune systems due to hunger and low access to treatment. Partners report numerous ongoing disease outbreaks including hepatitis A, as well as significantly elevated cases of acute watery diarrhea, respiratory infections, jaundice and miscarriages, ranging from 25 to 300 times higher than pre-crisis levels. Notably, the February 2024 Nutrition Cluster assessment found that 90 percent of children under five were affected by one or more infectious diseases and 70 percent had acute watery diarrhea in the last two weeks. Increased centralization of IDPs in open-air or informal shelters and congested areas – especially in Rafah – only places further stress on WASH and health resources and increases the risk of disease spread.

Projected food security conditions through July 2024

Conflict

From March to July, the most likely scenario is based on the assumption that ground operations will continue in northern Gaza and southern Gaza, with a new aerial and ground offensive in Rafah. Internal pressure within Israel to deliver more decisive military victories against Hamas, limit aid into Gaza, and secure the return of hostages – two of whom were recently rescued from Rafah – will likely drive the Israeli administration to escalate operations in Rafah, even though the precise timeline for this escalation is unknown.16 Restriction of fuel supplies and IDF-enforced power outages are likely to worsen with the extended operations; it will be increasingly challenging for anyone without an e-Sim (requiring more expensive smartphones) or satellite phones (largely unavailable to civilians) to communicate, including for humanitarian mobilization for distributions, but also for individual receipt of remittances or electronic cash assistance during prolonged blackouts.

In northern Gaza, no substantial drawdown of troops is likely. With the re-emergence of Hamas in northern Gaza in late January, the IDF will likely focus on localized raids in targeted neighborhoods and more extended campaigns of engineered destruction of remaining infrastructure. To this end, the IDF will likely attempt forced evacuation of remaining IDPs, demolishing tent camps. With the expanded operations in Rafah, it is unlikely this will be accompanied by a clear or explicit relocation strategy, including safe evacuation corridors. Unclear directives are likely to result in recurrent displacement, interrupting already marginal access to

16 Even in the less likely event that a temporary ceasefire is successfully brokered during the outlook period, this is unlikely to fundamentally change access and administrative challenges in the absence of diplomatic intervention supporting the movement of aid and commercial goods, which are the two primary issues constraining food consumption and driving current outcomes.
food sources, and a new wave of trauma-related injuries and deaths of civilians is likely to add additional pressure on remaining, strained hospitals. Humanitarian access will remain limited, mostly due to administrative and physical obstacles.

In middle Gaza, after a brief period of relative reprieve and improved access in the current period, conflict conditions are likely to again deteriorate. As more infrastructure is destroyed – and aligned with typical urban warfare patterns – military operations will move more toward air and artillery attacks, which will in turn accelerate both the pace of infrastructure demolition as well as civilian casualties. Some access to middle Gaza will remain possible, and there will be fewer administrative impediments compared to reaching northern Gaza, but access will be contingent upon the security dynamics and the evolution of frontlines which may prevent humanitarian actors’ working in or traveling to Deir al Balah for extended periods of time.

In the rest of southern Gaza, there will be increased IDF troop presence with some troop relocation from northern Gaza. A full ground invasion is likely to extend into Rafah, including increased evacuation orders in and around IDP camps. Civilians are unlikely to be forcibly relocated en masse, but rather recommended to move to unofficially designated safe zones, including to Al Mawasi or Deir al Balah urban center. Civilian casualties will tend to increase as households will have less clear information about operations and safe areas. Many IDPs will likely remain in Rafah, due to lack of confidence in the veracity of designated safe zones. As a result, many IDPs will face repeated displacement near the Gaza border with Egypt (Figure 9).

**Market functionality**

From March to July, it is likely that commercial goods will constitute a very small share of the available food supply. Indeed, commercial goods may tend to further decrease given the expected deterioration in the functionality of markets in southern Gaza due to the anticipated ground invasion, as well as domestic Israeli political pressure to withhold resources from Gaza. Mounting desperation to access food is likely to result in some looting of remaining shops.

In northern Gaza, formal markets will remain non-functional as informal market supplies become increasingly exhausted. With increased infrastructure razing campaigns, remaining shops in Gaza City and physical informal market sites are likely to be destroyed. The planned opening of the temporary US-managed port and overland border crossing to northern Gaza may tend to improve food supply routes to northern Gaza. While neither supply route is expected to support commercial cargo – only humanitarian assistance – it is expected that increased humanitarian aid would support supply in informal markets. However, imports through both the port and land border will still be subject to persistent administrative barriers, resulting in similar delays and impediments currently faced at the Wadi Gaza crossing. Commercial activities will be further limited given infrastructure damage to market sites and most roads.

Across southern Gaza, distribution channels will be greatly disrupted as supplies struggle both to cross the border and pass new frontlines in Rafah, Khan Younis, and Deir al Balah. This will restrict access to informal or humanitarian aid resale markets. Markets in Rafah, which were key commercial hubs, will likely face increasing infrastructure damage and will reduce operations following patterns in conflict-affected areas of Khan Younis. Some IDPs relocating from Rafah may attempt to return and establish shops in the north; however, increasing destruction of both market and road infrastructure will largely make reopening infeasible. Market food prices in all locations will continue to reflect heavy inflation (with the potential for escalating prices in middle and southern Gaza with increased reliance on informal markets and black-market pricing), further reducing household purchasing power.
Household income sources
Most of the current constraints on household income-earning capacity – including formal and informal work, cash assistance, and remittances – are expected to persist into the forecast period. In addition, skilled and unskilled labor opportunities may further shrink due to the increasing strain placed on informal markets by conflict, so income sources will likely be increasingly limited to humanitarian-related employment. UNRWA funding cuts are likely to drive further labor market contractions, resulting in unemployment for a substantial share of the several thousand Gazans and Gazan diaspora – who are assumed to send remittances – currently under their hire; while major donors will attempt to reappportion funding to other partners, resulting in some re-employment, it is likely this will be a delayed process. In southern Gaza, specifically, increasingly restricted power and telecommunications networks, mounting market dysfunction in Rafah, and displacement of financial service providers will likely reduce opportunities for humanitarian cash assistance and remittance flows. Further diminished income-generating opportunities in southern Gaza will constrict purchasing power at a time when prices are high.

Local food production
The conditions currently preventing local food production will tend to worsen throughout Gaza during the forecast period. In northern Gaza destruction of farmland, loss of most productive assets, and negligible access to farmland will prevent the cultivation and harvest of all key crops in the upcoming production cycle. Seasonally available wild foods will also no longer be available heading into the dry summer season. In southern Gaza, as the conflict escalates in Rafah, semi-rural households who earned income generated from modestly successful harvests sold at high market prices earlier in the conflict will see this source of income become exhausted. More agricultural land will be damaged aligned with trends observed in operations in Deir al Balah and Khan Younis, preventing farmers from accessing lands for the upcoming wheat, zucchini, and okra harvests.

Notably, while rainfall crop production was possible in the first phases of the conflict as it was the rainy winter season (November-February), cultivation will become infeasible as the dry summer season approaches (peak from May-August). Agricultural production will increasingly only be possible with greenhouses, many of which have been and will likely continue to be destroyed as conflict escalates in the south. By end of December over 20 percent of Gazan greenhouses were destroyed, including 15 percent in Deir al Balah, 16 percent in Rafah, and nearly 25 percent in Khan Younis. Moreover, semi-rural households are unlikely to have planted new crops, as households resorted to eating seeds during the current period when food access was limited. Due to the ban on imported agricultural inputs, seed stocks will not be replenished.

The growing population density in Rafah (0.065m²/person) already shrunk agricultural lands during the current period; during the next three months, agricultural livelihoods in Rafah will no longer be viable as the full invasion forces displacement to any available areas outside of the city, including to remaining agricultural lands. As a result, while livelihoods were more protected for semi-rural households through February in southern Gaza – and Rafah in particular – this is unlikely to continue in the medium-term.

Humanitarian food assistance
It is anticipated that a little more than half of needed food assistance will be allowed to enter Gaza (compared to just under 50 percent in the current period); however, mounting distribution challenges are expected to reduce overall access to food aid during the forecast period. Given the scrutiny from the International Court of Justice (ICJ) on food assistance and heightened diplomatic pressure, food aid will most likely continue to be delivered with efforts to increase the entry of aid. In addition to the two current supply routes (Rafah and Kerem Shalom), three new sources of humanitarian food assistance (air drops, shipments by sea, and a new land border for northern Gaza) may tend to improve food supplies in the forecast period; however, the degree to which air drops and sea shipments will have an impact is limited. Even if the supply of food assistance improves, escalating conflict and evacuation of populations in the south are expected to increasingly disrupt the distribution of, and populations’ access to, that aid. Given the scale of current food needs, the near complete dependence of the entire Gaza population on humanitarian assistance as its primary source of food, and the anticipated increase in access challenges following an Israeli ground operation in Rafah, many Gazans will still face large to extreme food consumption gaps, with a high share facing deficits of over 50 percent.

Air dropped food assistance may tend to become more regular over the forecast period. While important for reaching targeted, hard-to-reach populations, air dropped food will be insufficient to meet the current scale of need. Each air drop has distributed around 36,000 Ready to Eat Meals (MREs) containing 1,250 kilocalories each, sufficient food to cover approximately all kilocalorie needs for 22,619 people for one day: less than one percent of the Gaza population. This is comparable to kilocalories carried by
two food trucks.\(^{17}\) Gaza would need approximately 36 airdrop missions (eight in northern Gaza, 26 in Rafah, and two in Khan Younis) per day to cover unmet food requirements. So far, three air drop missions have been confirmed for March. Even with significantly more airdrops, they will negligibly improve food availability.

With the opening of the US-operated port, the availability of food across Gaza may tend to slightly increase. The first shipment of food aid via Cyprus is carrying 200 tons of food, which is roughly equivalent to 14 trucks\(^{18}\) carrying an average of 24,000,000 kilocalories each. Based on current food consumption gaps, Gaza would require five boat shipments of this size per day (one for northern Gaza and four in southern Gaza) to cover current kilocalorie needs. However, in the absence of Israeli policy shifts, aid entering through both the port and land borders will continue to be subjected to administrative and access challenges, limiting their supply possibility. Assuming sea shipments can be regularized, but also considering the limitations of administrative processing times in both Cyprus and upon landing in Gaza, along with the approximate five-day shipment time from Cyprus, sea shipments are only likely to improve the food supply by around 20 percent; uneven distribution patterns of arriving aid across the Strip will tend to continue given persistent humanitarian access issues.

The opening of one new border crossing directly connecting to northern Gaza is expected to support humanitarian food availability over the forecast period. As of March 13, however, only one mission of six trucks (food and non-food) has used this border crossing. If missions normalize, this new border crossing may tend to double food assistance deliveries to northern Gaza; this would be broadly aligned with the 73 percent increase in food truck crossings to southern Gaza\(^{19}\) that occurred following the re-opening of the Kerem Shalom border. Even in the unlikely scenario that aid doubles because of this new border crossing, it is estimated that these aid flows combined would cover no more than 30 percent of minimum daily kilocalories for the north Gazan population. This relatively low level of assistance, coupled with likely unequal distribution due to continued access constraints and the time required to increase border flows to this level, imply that the maximum anticipated level of aid is inadequate to prevent Famine (IPC Phase 5), especially when considering the current severity of malnourishment. Israeli protests at border crossing points are also likely to continually interrupt aid and humanitarian movements through all Israeli land borders to Gaza.

While availability of assistance may tend to improve, distribution challenges and populations’ access to available food are likely to worsen. In northern Gaza, humanitarian food aid distribution may become even more challenging given anticipated IDF operations to close and relocate remaining northern Gazan tent encampments, making these populations even more mobile and hard-to-reach. Equally, the desperate conditions will worsen civil disorder, interrupting humanitarian distributions. Civil unrest is likely to undermine community cohesion, resulting in less intra-community resource sharing. Paired with more infrastructure destruction presenting physical barriers to reach distribution sites, Gazans with specific protection needs — including widows, orphans, and people with disabilities — will increasingly struggle to access any food supplies. In southern Gaza, the increasing telecommunication blackouts around the Rafah operations as well as conflict close to the border crossing point will increasingly challenge food distribution operations, limiting effective allocation of resources. In Khan Younis, where a significant share of the population is immobilized, increased availability of food supplies alone will not assure populations can access food.

While several donors have committed to reinstating their support to UNRWA, many of the biggest humanitarian donors have withdrawn their funding for the agency. UNRWA is the largest aid actor in Gaza, having provided over 70 percent of all kilocalories distributed to Gazans in 2024. While donors are likely to attempt to reallocate these funds to other agencies and partners, this is expected to be a delayed process that will create a gap in available humanitarian food assistance during the forecast period. It is likely this may tend to slightly reduce humanitarian food assistance supply across the Strip, though the scale is not yet clear. Further, partners report that UNRWA’s long-built community and stakeholder network facilitated broader humanitarian access to otherwise hard-to-reach areas and frontlines in Gaza; this access cannot be replaced by other partners. Therefore, FEWS NET anticipates that this change will more likely inhibit distribution of aid to and within Khan Younis and northern Gaza, than overall food assistance availability across the Strip.

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\(^{17}\) Based on manifest data from October 21, 2023 to March 3, 2024, each food truck entering Gaza (89 trucks/day) contained approximately 24,000,000 kilocalories on average, while each airdrop (comprised of between 3 to 8 individual C-130 cargo planes) reportedly distributed no more than 47,500,000 kilocalories.

\(^{18}\) Based on manifest data from October 21, 2023, to March 3, 2024, each food truck contained approximately 14 tons of food.

\(^{19}\) Prior to the reopening of Kerem Shalom (October 21–December 16), 66 food trucks were entering per day on average. With the reopening of Kerem Shalom (December 17–March 3), food truck entries rose to 114 per day on average.
Projected acute food insecurity outcomes through July 2024

Famine (IPC Phase 5) is projected in northern Gaza, while Emergency (IPC Phase 4) is projected in southern Gaza

FEWS NET projects that up to 100 percent of Gaza’s population will continue to face Crisis (IPC Phase 3) or worse outcomes, and an urgent humanitarian multisectoral response including food, nutrition, and WASH interventions is imperative to save lives.

An imminent descent into Famine (IPC Phase 5) is anticipated in northern Gaza, where the marginal scale-up in anticipated food assistance by land, air, and sea is desperately needed but is occurring too slowly and in insufficient quantities given that two of the three criteria to classify Famine (IPC Phase 5) had likely already been reached by February. The time required to increase assistance flows to reach the estimated 30 percent kilocalorie coverage across the north, and the likelihood of unequal distribution to the northern Gaza population due to access constraints, imply that aid flows will mitigate but not prevent kilocalorie deficits of 50 percent or more. As a result of sustained hunger coupled with rising disease incidence, levels of acute malnutrition and mortality are both expected to exceed the Famine (IPC Phase 5) criteria. From March through July, well over 20 percent of the population will continue to face extreme food consumption deficits of 50 percent or more; acute malnutrition will accelerate above the Extremely Critical threshold; and non-trauma mortality levels will substantially increase and most likely surpass the Crude Death Rate threshold of 2/10,000 people per day. FEWS NET agrees with the Famine Review Committee (FRC) that Famine (IPC Phase 5) would most likely arrive by May.

In southern Gaza (Khan Younis, Deir al Balah, and Rafah), Emergency (IPC Phase 4) outcomes will most likely persist with many households facing Catastrophic (IPC Phase 5) food consumption gaps. These classifications reflect a persistently severe situation in which atypically high mortality levels are expected to materialize. While similar to higher availability of humanitarian food assistance is anticipated, food access and utilization constraints are expected to become more severe following the anticipated ground invasion of Rafah. The sustained experience of large kilocalorie deficits among a majority of the population will drive rising levels of acute malnutrition that will likely lead to elevated non-trauma mortality. However, the relatively lower levels of malnutrition observed in the south as of February – especially in Deir al Balah and Rafah – and relatively better proximity and access to available food and health services during the projection period suggest the pace at which malnutrition and mortality will worsen is unlikely to reach Famine (IPC Phase 5) thresholds.

Available evidence on food consumption

In northern Gaza, access to food will likely substantially deteriorate, offsetting a potential increase in food availability associated with nascent plans for air, sea, and land deliveries. As civil disorder worsens with mounting desperation, community bonds will tend to erode, reducing patterns of resource sharing which had supported some access to food for vulnerable groups (widows, women or children-headed households, and persons with disabilities). With expected forced relocation of remaining camp-based residents but no improvement in mobility conditions – which will effectively paralyze populations in evacuation zones – humanitarian actors will struggle to reach affected populations, and populations will struggle to access centralized distribution points. Continued administrative and access challenges at all border points, the reduction of UNRWA networks and aid supporting food distribution, and seasonal contraction of wild foods will together significantly limit food availability and distribution, despite new supply routes. Food utilization challenges will also largely continue and worsen as looted furniture and trees burned for fuel in the earlier stages of the conflict will likely become exhausted, and WASH resources become increasingly scarce as water needs increase during the dry season. Based on FEWS NET’s HEA OA for northern Gaza, survival deficits of (≥50 percent) indicative of Catastrophe (IPC Phase 5) will be experienced by nearly 100 percent of the population (Figure 10).

In southern Gaza, food availability will tend to remain similar or slightly reduce overall, while access to food is anticipated to worsen following the anticipated ground invasion of Rafah. Larger daily variations in food availability are expected due to the expanded ground operations in Rafah, which will interrupt commercial and humanitarian border crossings and drive increased dependence on informal markets. At the same time, violence and looting as a coping mechanism may increase as food availability constricts, especially in densely populated camps. Harvests during this period will not occur given displacement of populations to agricultural lands, consumption of seeds in the previous period, agricultural input bans, and the anticipated expansion of the conflict to all agricultural-producing areas; any limited savings of the “better-off” semi-rural households in Rafah will be depleted toward the end of the forecast period given high market prices for remaining food.

Furthermore, access to food in southern Gaza will likely deteriorate as the conflict destroys road access to remaining markets in the south and evolving frontlines further limit mobility. As more infrastructure in Deir al Balah and Khan Younis is destroyed,
physical access to remaining markets and food distribution sites will become increasingly challenging. Additionally, financial access to food will likely substantially deteriorate. With anticipated, expanded telecommunications cuts in Rafah, it is likely that income will become even more restricted as remittance flows and cash transfers become increasingly impossible, especially as financial service providers are displaced. Food utilization challenges may also tend to worsen as more water infrastructure is damaged and water trucking services are interrupted at a time when water requirements are seasonally high. Based on FEWS NET’s HEA OA after the anticipated Rafah invasion, the size of household kilocalorie deficits is expected to increase to 50 percent or more – surpassing the threshold for Catastrophe (IPC Phase 5) – among up to 93 percent of Rafah’s current population. It is likely that some share of Deir al Balah’s population will see a similar rise in survival deficits (Figure 10).

**Figure 10** HEA Outcome Analysis results by Livelihood Zone (LZ) and Wealth Group with indicative IPC Phase classifications, post-Rafah invasion (forecasted hazard profile)

<table>
<thead>
<tr>
<th>Area</th>
<th>Governorate</th>
<th>% of total Gaza population</th>
<th>Urban Livelihood Zone (URB LZ)</th>
<th>Semi-Agricultural Livelihood Zone (SAG LZ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estimated % of Gaza population in the LZ</td>
<td>Very Poor (24% of the LZ population), Indicative IPC Phase</td>
</tr>
<tr>
<td>Northern Gaza</td>
<td>North Gaza</td>
<td>5%</td>
<td>100%</td>
<td>Survival deficit ≥ 50%, Phase 5</td>
</tr>
<tr>
<td></td>
<td>Gaza</td>
<td>5%</td>
<td>94%</td>
<td>Survival deficit ≥ 50%, Phase 5</td>
</tr>
<tr>
<td>Southern Gaza</td>
<td>Deir al Balah (or middle Gaza)</td>
<td>10%</td>
<td>99%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Khan Younis</td>
<td>21%</td>
<td>99%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Rafah (after new offensive begins)</td>
<td>59%</td>
<td>97%</td>
<td>Survival deficit ≥ 50%, Phase 5</td>
</tr>
</tbody>
</table>

Source: FEWS NET analysis using HEA baseline data

Note: Deir al Balah and Khan Younis calculations are not included due to the absence of a baseline Livelihood Impact Analysis Spreadsheet (LIAS) tool for these two governorates, so livelihood outcomes from the crisis can only be inferred based on similarities in the context of deterioration compared to other assessed areas but cannot be quantified.
Available evidence on acute malnutrition and mortality

In northern Gaza – where most of the population has already endured Catastrophic (IPC Phase 5) kilocalorie deficits for several months and acute malnutrition levels had likely already reached the Famine (IPC Phase 5) threshold by February – levels of acute malnutrition are expected to accelerate and translate to a rapid increase in non-trauma, hunger-related deaths. The increase in mortality will most likely also be linked to mounting comorbidity between hunger-related weakened immunity, malnutrition, and disease spread. In the first five months of the conflict, low baseline wasting (0.8 percent), the pre-crisis overweight and obesity prevalence (6 percent), and high routine vaccination rates (over 90 percent) among children likely tempered the rate of acute malnutrition decline. Even still, the severity of kilocalorie deficits coupled with weakening immunity and rising disease incidence still resulted in an over 35-fold increase in GAM in northern Gaza.

Acute malnutrition prevalence is expected to rapidly worsen, with high confidence that GAM will exceed the Extremely Critical threshold (GAM by MUAC ≥15 percent or WHZ ≥30 percent) regardless of measurement methods, given the confinement conditions which have already exhausted coping strategies and prevented mobility. While one model from leading epidemiologists at the London School of Hygiene and Tropical Medicine (LSHTM) forecasts that the national GAM prevalence will increase by over 50 percent between February and August (to 21.6 percent GAM by WHZ [CI: 4.2-61.5]), this estimate is understood to be conservative, especially for northern Gaza. Food consumption is heavily overstated in this model, with food assistance assumed to contribute upward of 80 percent of needed kilocalories, compared to the 15 percent actual contribution observed across northern Gaza as of early March 2024. Moreover, the model does not capture how market changes may impact infant nutrition; notably, pre-crisis, mothers relied heavily on formula to feed infants – less than 25 percent of children under 6 months were exclusively breastfed – whereas, in absence of cultural and healthcare support, and considering parents’ own poor nutritional and psychological condition, mothers will likely be unable to sufficiently substitute infant food needs with breastmilk.

The same LSHTM epidemiologists also projected potential mortality levels, which has been critical for framing expectations around the likely severity of rising non-trauma mortality. Without a significant escalation of hostilities, the model forecasts a mean estimate of 0.33 non-trauma deaths per 10,000 per day [CI: 0.05-3.25] when trauma-related deaths are removed. The wide confidence interval – which exceeds the Famine (IPC Phase 5) threshold of 2.0 on the high end – conveys not only the limitations of the model but also how evolving contextual factors can impact and shift the most likely mortality outcome. As detailed below, it is FEWS NET’s analysis that mortality levels will most likely be higher than the projected mean estimate and fall toward the higher end of the confidence interval (3.25 deaths/10,000 per day).

As the Technical Annex provided by the LSHTM authors highlights, the models insufficiently account for the interaction between acute malnutrition and disease when projecting mortality, a major consideration and concern in emergency contexts. Approximately 2.9 percent of northern Gazan children had SAM based on MUAC-for-Age collected in January, and partners report no nutritional assistance (including SAM treatment) has reached the north since then. On average, the WHO estimates a 10 to 20 percent case fatality for untreated SAM cases – and 5 percent even when they are treated – and MUAC is generally considered to be better at measuring SAM and identifying children at highest risk of dying if left untreated; therefore, a large share of northern Gazan children with untreated SAM will likely ultimately die. Furthermore, the share of these children who do not succumb to SAM directly will have severely compromised immune systems that render them more vulnerable to disease, contributing to elevated mortality among this population. As waterborne disease outbreaks were not previously recorded in Gaza, it was difficult to model the extent to which waterborne diseases would spread and drive mortality. Yet, given that water availability is between 1-3 l/p/d (and less than 1 in northern Gaza), with widespread consumption of saline and contaminated water sources, waterborne disease risks will tend to accelerate. Using this contextual understanding, FEWS NET anticipates the CDR will tend toward the higher-end confidence interval (3.25 deaths/10,000 per day), exceeding the Famine (IPC Phase 5) threshold (2 deaths per 10,000 per day).

In southern Gaza, while all three governorates are likely to observe deterioration in nutritional status and mortality, this deterioration will likely remain indicative of Emergency (IPC Phase 4). While the limitations of the LSHTM models apply for all of Gaza, FEWS NET assesses that both acute malnutrition and mortality levels will increase at a slower pace in southern Gaza. The slower rate of increase reflects the relatively lower current levels of GAM by MUAC and the population’s relatively higher access to humanitarian food, nutrition, and health services compared to the north. Still, the anticipated decline in access to food and trajectory of other key contributing factors will drive deterioration in acute malnutrition and mortality levels. Populations will

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20 CDR figures have been adjusted from the LSHTM study by the IPC Global Support Unit, removing trauma-related deaths per IPC protocols.
continue to face water shortages and large food consumption deficits, weakening their immune systems; they will be increasingly centralized in informal and open-air camps after multiple waves of displacement, creating conditions ripe for disease transmission; more of remaining WASH infrastructure is likely to be damaged during the summer when water needs are seasonally higher; and the relatively better healthcare systems will tend to deteriorate with mounting damage and even closure of key remaining health facilities, as well as populations’ inability to access them due to conflict. Sick Gazans will be unable to seek treatment for cases of hunger-related disease and acute malnutrition. These factors will drive increasing excess mortality.

**Risk of Famine (IPC Phase 5) Analysis for Khan Younis**

While it is not the most likely scenario, FEWS NET warns that Khan Younis faces a risk of Famine (IPC Phase 5) if mobility is further confined by the hardening of frontlines, reducing populations’ access to food assistance and healthcare.

Since January, food assistance has been distributed across Khan Younis such that the availability of kilocalories should be enough to cover the needs of 93 percent of the population. Yet, severe hunger has persisted among the population due to periodic escalations of conflict, resulting in the confinement of populations that left them with irregular and insufficient access to food assistance distribution points. Food aid that was not directly consumed after distributions – exceeding needs – was largely sold through informal markets, making aid secondarily accessible to other households, including to those confined during distributions. However, access to resold assistance depends on household purchasing power relative to high informal market prices. Furthermore, purchasing power is highly limited for most populations. This has become a vicious cycle for poor, urban dwellers in Khan Younis who have been subject to intermittent periods of besiegement and are therefore unable to earn income and/or access food assistance first-hand as either a source of food or petty income.

By February, assessed GAM by MUAC (12.73 percent) was already within Serious or Critical levels (GAM by MUAC 10-14.99 percent), having indicatively increased over 15-fold since the pre-crisis baseline (0.8 percent) during a period of relatively slower deterioration in acute malnutrition. This is markedly higher than the Acceptable or Alert levels of acute malnutrition observed in Rafah or Deir al Balah. Based on the projected trajectory of conflict and confinement, acute malnutrition levels in Khan Younis are expected to accelerate further in the most likely scenario; however, it is currently considered unlikely that acute malnutrition will breach the Famine (IPC Phase 5) threshold. It is assumed that the relatively significant share of humanitarian assistance that has reached Khan Younis to date will continue at similar levels, though again at intermittent intervals; access to some degree of health and nutritional services supporting treatment of SAM and disease cases is also assumed to continue. These factors are expected to prevent a steeper increase in levels of acute malnutrition and, consequently, levels of mortality. As such, Emergency (IPC Phase 4) and Catastrophe (IPC Phase 5) are considered the most likely outcomes.

However, FEWS NET assesses there is a credible alternative scenario in which acute malnutrition and mortality would rise to meet or exceed the Famine (IPC Phase 5) thresholds, given that the prevention of Famine (IPC Phase 5) hinges on access to food assistance as well as health and nutritional services. Small changes in conflict dynamics could impede civilian mobility for more prolonged periods and further tighten humanitarian access, shrinking food assistance and healthcare services. Additionally, the worsened conflict might prompt more centralization of populations in overcrowded and increasingly open-air camps exacerbating WASH and disease drivers of acute malnutrition and comorbidities. These factors would likely tip acute malnutrition and mortality rates in Khan Younis toward Famine (IPC Phase 5). To mitigate hunger, prevent high levels of acute malnutrition, and eliminate the risk of rising mortality, humanitarian partners must scale-up food assistance even further. This must be paired with key policy decisions to guarantee safe, humanitarian access to conflict-affected areas and assure civilian evacuation corridors; the risk of Famine in Khan Younis cannot be fully averted in the absence of a lasting ceasefire.

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21 FEWS NET’s approach to analyzing a risk of Famine (IPC Phase 5) is based on defining the parameters of a credible alternative scenario. FEWS NET acknowledges that the FRC determined a risk of Famine (IPC Phase 5) across all of southern Gaza by identifying multiple factors that drive this risk. FEWS NET acknowledges these factors are a concern and agrees with the FRC that the situation across the south is volatile and presents the potential for more extreme deterioration in acute food insecurity outcomes than currently projected. In the unlikely event of a true worst-case scenario in which an immediate ground offensive cuts off aid from entering Rafah by truck and/or available aid is largely unable to reach inaccessible populations; and if this occurs for a protracted time such that stocks prepositioned prior to the offensive become exhausted and malnutrition treatment is unavailable; then FEWS NET would anticipate a faster and more severe acceleration of acute malnutrition and mortality levels, with a likelihood that the acute malnutrition and mortality thresholds for Famine (IPC Phase 5) would be reached after July.
Other events that may change the above scenarios and require close monitoring

The context of Gaza is highly volatile. Below are events with a reasonable chance of occurrence that require close monitoring, as they would likely affect not only the assessment of the projected outcomes in the most likely scenario, but also the assessment of the risk of Famine (IPC Phase 5). The ordering of events does not indicate potential timing, severity of impact, or relative likelihood of occurrence.

- The IDF launches a new offensive that results in intensifying conflict in the governorate of Deir al Balah, which immobilizes an increasingly large share of the population located in Deir al Balah’s urban center. This would erode access to humanitarian assistance among both the expected surge of IDPs fleeing the anticipated ground offensive in Rafah and the remaining residents of Deir al Balah.

- Prior to the Rafah invasion, the IDF forcibly relocates women and children of the southern IDP population back to the north, separating them from men who are forced to stay in southern Gaza. This would likely lead to an acceleration of acute malnutrition among this population given that women and girls have larger intra-familial food consumption gaps, and cannot access critical health and malnutrition services which are largely non-existent in the north.

- No invasion of Rafah occurs, suggesting levels of food consumption, malnutrition, and mortality observed as of February would likely be maintained at similar levels across southern Gaza, without the accelerated deterioration currently expected over the forecast period. This change alone would not likely impact forecasts for northern Gaza.

- Changes to Israeli policy about checkpoint management allow for significantly improved inflows of assistance. Opening of new border crossing points alone does not signal this policy shift. More likely indications of these changes would be the significant increase in allowed commercial activity into Gaza, removal of food pallet weight restrictions (currently strictly 750 kilograms per pallet which has reduced the number of kilocalories each truck can transport since the onset of the crisis) and the removal of agricultural good import restrictions. This would improve food consumption forecasts for the projection period.

- The Wadi Gaza checkpoint is opened for free-flowing aid but also human mobility, ending prolonged movement restrictions in the north and opening new coping opportunities for these households. This would also tend to improve food availability and access, as well as the populations’ access to remaining nutritional and health services.

- Egypt opens its border for refugee inflows, allowing Gazans to escape strict confinement and improve access to food, health, and nutritional supplies more readily in a camp-based setting.

- A permanent ceasefire may improve physical access to markets, distributed aid, and health facilities where those goods and services still exist. The extent to which a permanent ceasefire improves food availability or curbs the deterioration of malnutrition and mortality depends on the terms of the ceasefire, including the degree to which it provides policy changes assuring greater mobility of people and items across the Gaza Strip.

Recommended citation: FEWS NET. Gaza Targeted Analysis, March 18, 2024. Famine (IPC Phase 5) is imminent in northern Gaza, likely by May.