

Nutrition Vulnerability and Situation Analysis / **Gaza**



February 2024

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We reaffirm our commitment to continued collaboration with the Global NIS-GTWG, our country-level partners, and the broader nutrition humanitarian community, as we collectively strive towards improving nutrition outcomes in Gaza.

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ACRONYMS

| | |
|---------------|--|
| ARI | Acute Respiratory Infection |
| CU5 | Children Under 5 years old |
| FCS | Food Consumption Score |
| GHC | Global Health Cluster |
| HH | Households |
| HIMS | Health Monitoring Information System |
| IDP | Internally Displaced Person |
| IMC | International Medical Corps |
| IPC | Integrated Food Security Phase Classification |
| KII | Key Informant Interviews |
| LNS-MQ | Lipid-based Nutrition Supplement-Medium Quantity |
| MICS | Multiple Indicator Cluster Survey |
| MSNA | Multi Sectoral Needs Assessment |
| MUAC | Mid Upper Arm Circumference |
| NIS-E | Nutrition Information Systems in Emergencies |
| NNGO | National Non-Governmental Organisation |
| PBW | Pregnant and Breastfeeding Women |
| PHC | Primary Healthcare Facility |
| PPPD | Per person per day |
| RUTF | Ready-to-eat Therapeutic Food |
| WASH | Water, Sanitation and Hygiene |



EXECUTIVE SUMMARY

This Report documents the deteriorating nutrition situation during the first 120 days of the current war. It outlines the findings of a nutrition situation analysis carried out in Gaza between December 2023–January 2024 and fills a crucial gap in nutrition data, where none had previously been available.

This analysis was conducted by a task force on Global Nutrition Information Systems in Emergencies under the leadership of the Global Nutrition Cluster to support the State of Palestine's National Nutrition Cluster to analyse the nutrition situation in Gaza, with a focus on infants, children, pregnant and breastfeeding women.

The findings from the analysis show a sharp escalation in the drivers of malnutrition: food insecurity; lack of diet diversity; deteriorating infant and young child feeding practices; lack of access to safe water and sanitation; widespread disease; and a collapsed health system. This has severe consequences for those most vulnerable to malnutrition, including young children, and pregnant and breastfeeding women.

Results from the analysis suggest that the nutrition situation of women and children in Gaza is worsening, everywhere, but especially in Northern Gaza and Rafah.

In Northern Gaza, 1 in 6 children are acutely malnourished, with an estimated 3% facing the most severe form of wasting and requiring immediate treatment.

While there are differences in the data from different governorates, the analysis indicates a dire nutrition situation for the entire population of Gaza, both in the short and long term. It is expected that all areas of Gaza will be affected by malnutrition, but governorates receiving limited or no humanitarian assistance will be particularly impacted.

As lack of access impeded the collection of anthropometric measurements, the taskforce proposed a multi-sectoral analytic approach focusing on the drivers of acute malnutrition. The analysis also considered nutritional vulnerabilities; humanitarian assistance being provided; and access to health, water, sanitation and hygiene (WASH) and social protection services. Mid-upper arm circumference (MUAC) screening was conducted in two shelters in North Gaza as well as UNRWA shelters in Rafah, where vaccinations were being provided for children aged 6–23 months.

Conclusions on the nutrition situation in Gaza have been drawn from an analysis of the 4 main drivers of malnutrition. This is an innovative approach, borne of necessity in a context where the collection of anthropometric measurements has been largely impossible.

As mentioned, the evolution of the nutrition situation is influenced by humanitarian access. Areas with limited to no humanitarian access, and a high disease burden and food insecurity, are likely to experience a more

rapid deterioration in the nutritional status of children under 5, pregnant and breastfeeding women. In areas with more humanitarian access, the speed and scale of deterioration may be slower, resulting in a slow, persistent increase in the prevalence of all forms of malnutrition. The lives, nutritional wellbeing, growth, and development of Gaza's children is at stake and needs to be urgently protected.

Table 1: Summary of Nutrition Situation

| Driver* | Baseline | North Gaza | Gaza City | Deir al Balah | Khan Younis | Rafah |
|---|--------------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Dietary Diversity in children 6-23m | Moderate | Extremely Critical | Insufficient sample | Extremely critical | Extremely critical | Extremely Critical |
| Dietary diversity in pregnant and breastfeeding women (PBW) | No recent data available | Extremely Critical | Insufficient sample | Extremely Critical | Extremely Critical | Extremely Critical |
| Children reporting one or more diseases | Low | Insufficient sample | Insufficient sample | Extremely Critical | Insufficient sample | Extremely Critical |
| Acute respiratory infection (ARI) in children under 5 (CU5) | Low | Insufficient sample | Insufficient sample | Critical | Insufficient sample | Critical |
| Diarrhoea (CU5) | Low | Insufficient sample | Insufficient sample | Extremely Critical | Insufficient sample | Extremely Critical |
| Other diseases (fever, vomiting, skin infection) | Low | Insufficient sample | Insufficient sample | Extremely Critical | Insufficient Sample | Extremely Critical |
| Water and sanitation access | Severe | Insufficient sample | Extremely Critical | Extremely Critical | Insufficient sample | Extremely Critical |
| Acute malnutrition (by anthropometry) in children 6-23m | Low | Critical | Insufficient sample | Insufficient sample | Insufficient sample | Low |

* Full details on nutrition vulnerability analysis by governorate is presented in the report. Details on the thresholds can be found in Annex 1.

MAIN FINDINGS

A comprehensive analysis of data gathered under exceptional circumstances, indicates the following key results:

- Over 90% of children aged 6–23 months and pregnant and breastfeeding women face severe food poverty—eating two or fewer food groups each day. The food they have access to is of the lowest nutritional value.¹
- At least 90% of children under 5 are affected by one or more infectious disease and 70% have had diarrhoea in the past two weeks. This unprecedented increase has direct implications on the nutritional status of children under 5, as well as other vulnerable populations.
- 81% of households lack safe and clean water, with average household access at less than one litre per person per day. This is far from the minimum standard of 15L per person per day and of particular concern for babies being fed infant formula.
- Infant feeding practices, suboptimal before the crisis, have further deteriorated, and an increased number of infants now rely on formula milk for survival – which requires safe and clean water. The scarcity of clean drinking water in Gaza will further expose young children to an increase in the risk of infection and subsequently malnutrition.

MUAC screening in North Gaza² shows a rapid deterioration of the nutrition situation with global acute malnutrition (GAM) rates at over 15% among children aged 6–23 months – 1 in 6 children are acutely malnourished. While humanitarian access to North Gaza is heavily constrained,³ the nutrition situation is likely to continue to worsen and quickly. In Rafah, GAM among the same age group is 5%; this lower rate is mainly due to the humanitarian assistance being provided, but already show a deterioration in the nutritional status.

Two scenarios were outlined for potential nutrition deterioration in Gaza— with both indicating poor nutritional outcomes for women and children.

- **Rapid Decline Scenario.** Triggers such as infectious diseases, and the destruction of health facilities, with very limited to no humanitarian access, will result in a swift increase in acute malnutrition, and high risk of mortality, especially among children under five.
- **Slow Deterioration Scenario.** Driven by severe poverty and lack of health services, areas with limited humanitarian access still forecasts a slow but continuous decline of the nutritional status of women and children.

Overall, the evolution of the nutrition situation will be determined by humanitarian access. Areas with very limited humanitarian assistance, and with high burden of disease and food insecurity, are likely to experience a more rapid deterioration in the nutritional status of populations vulnerable to malnutrition, particularly children under 5 and pregnant and breastfeeding women. In areas with greater humanitarian access, the speed and scale of deterioration is likely to be slower, yet it will still be continuous, leading likely to a consistent and constant rise in child wasting, maternal undernutrition, and micronutrient malnutrition.



1 Lists of food groups can be found in Annex 2.

2 Initial data from North Gaza included in this analysis has limitations 1) Only MUAC is used in the screenings, 2) Screenings were conducted among children accessing routine immunization services at 2 shelters 3) The data was collected primarily among children 6–24 months of age as associated with immunization activities 4) the data is not representative of all of North Gaza as it came from 2 shelters.

3 In January 2024, 56% of aid missions planned for the North of Wadi Gaza were denied access by the Israeli military (Hostilities in the Gaza Strip and Israel – reported impact, 6 February 2024).



INTRODUCTION

Pre-Crisis nutrition situation in State of Palestine

Prior to the current conflict, more than 75% of the population relied on assistance in the Gaza strip. Table 1 presents a breakdown of governorates, showing that this reliance ranged from 70% to as high as 85%.

TABLE 1: FOOD INSECURITY AND ASSISTANCE IN THE DIFFERENT GOVERNORATES OF THE GAZA STRIP IN 2021⁴

| Assistance levels in 2021 | | |
|---|-----------------|-------------------|
| Households relying on humanitarian assistance | 76.9% | |
| Governorate | Food Insecurity | Assistance levels |
| North Gaza | 62.1% | 73.7% |
| Gaza | 60.9% | 70.9% |
| Deir al Balah | 61.6% | 79.4% |
| Khan Younis | 61% | 83.7% |
| Rafah | 69.5% | 85.1% |

The baseline burden of both acute and chronic malnutrition in the Gaza Strip was low, prior to the current conflict, with prevalence of acute malnutrition by weight-for-height at 0.8% (including 0.4% severe acute malnutrition); stunting at 9.0%; and underweight at 2.1% among children under 5.⁵ In 2018, a multi-sectoral needs assessment using MUAC indicated that 18% of pregnant women and 14% of breastfeeding women had a MUAC less than 230 mm, while 4% of children 6–59 months were identified with a MUAC less than 125mm.⁶

Previous studies in Gaza identified several factors associated with acute malnutrition, including “short maternal stature, poor socioeconomic status, urbanisation, and sedentary lifestyle, in addition to the political blockade.”⁷ Furthermore, the high dependency on aid was highlighted as creating a fragile state of food security that could break down in the event of an interruption of aid.⁸

4 Food Insecurity and Level of Assistance Gaza Strip (Pre-crisis) - WFP Infographic – Question of Palestine (un.org)

5 The Palestinian Multiple Indicator Cluster Survey, 2019–2020

6 Multi-Sectoral Needs Assessment (2018). The Nutrition Working Group, State of Palestine

7 Assaf et al (2023). Analysis of the nutritional status in the Palestinian territory: a review study.

8 Multi-Sectoral Needs Assessment (2018). The Nutrition Working Group, State of Palestine

Table 2 states pre-war figures on the drivers of acute malnutrition. Infectious diseases, such as diarrhoea and acute respiratory infections (ARI), were reported as moderate in the multi-sectoral needs assessment conducted in Gaza in 2018, and low in the MICS survey of 2019–2020. Anaemia was prevalent among pregnant women and infants, with 75% of children under 1 year

classified as anaemic.⁹ Furthermore, infant feeding practices were found to be poor, with 31% of infants using infant formula, and 41% of these receiving infant formula from a relief agency or NGO.¹⁰ Analysis on diarrhoea and ARI in Gaza found that babies who were not exclusively breastfed were twice as likely to be affected by disease compared to those exclusively breastfeeding.¹¹

TABLE 2: PRE 2023 CONFLICT HEALTH AND NUTRITION STATUS IN GAZA

| Drivers | |
|---|---|
| ARI | 8.1% of 6–59m reported ARI in preceding 2 weeks ¹² |
| Diarrhoea | 16.7% reported diarrhoea in preceding 2 weeks ¹³ |
| Anaemia | <ul style="list-style-type: none"> • 20.7% in the first trimester • 42.8% in the second and third trimesters¹⁴ • 31% in women of reproductive age (2019) • 75% of children < 1 year being anaemic |
| Low Birth Weight | 9.1% (2020) ¹⁵ |
| Drivers on the food insecurity pathway | |
| Food consumption score | 23% poor ¹⁶ |
| Food Insecurity | 62.2% ¹⁷ |
| Minimum Dietary Diversity in children under 5 ¹⁸ | 85% Consuming ≤ 4 food groups ¹⁹ |
| Drivers on the caring practices and WASH pathway | |
| Infant feeding practices | 41.6% exclusively breastfed (0–5 month) ²⁰ |
| Average water access | 15–20L per person per day, lower than recommended 50–100L ²¹ |
| Reliance on bottled water | 80% ²² |

9 Hamid et al (2020). Maternal Dietary Patterns during Early Pregnancy and Their Association with Pregnancy Outcome among Obese Women in Gaza Strip, Palestine: a Prospective Cohort Study

10 Multi-Sectoral Needs Assessment (2018). The Nutrition Working Group, State of Palestine

11 Ibid

12 The Palestinian Multiple Indicator Cluster Survey, 2019–2020

13 Ibid

14 Horino et al (2020) Dietary Inadequacy, Micronutrient Deficiencies, and Approaches to Preventing Poor Nutrition in the Gaza Strip

15 WHO Global Health Observatory

16 Multi-Sectoral Needs Assessment (2018). The Nutrition Working Group, State of Palestine

17 Gaza - Food Security Assessment – December 2023 | World Food Programme (wfp.org)

18 Percentage of children aged 6–23 months who received appropriate liquids and solid, semi-solid, or soft foods the minimum number of times or more during the previous day, by breastfeeding status, Palestine, 2019–2020

19 Multi-Sectoral Needs Assessment (2018). The Nutrition Working Group, State of Palestine

20 The Palestinian Multiple Indicator Cluster Survey, 2019–2020

21 ACAPS (2023). Water Crisis in the Gaza strip Briefing Note

22 Ibid

METHODOLOGY

Access issues constrained the collection of anthropometric data, therefore the Global NIS-E taskforce carried out a multi-sectoral analysis focusing on the drivers of acute malnutrition, such as limited dietary diversity, lack of safe water, and increase in disease, including diarrhoea. The analysis also considered nutritional vulnerabilities; the provision of humanitarian assistance; and access to health, sanitation and social protection services.

The following steps were undertaken:

STEP 1: Identified existing primary data collection (mainly UNICEF post distribution monitoring (PDM) and WFP computer assisted telephone interviews (CATI) (remote surveys)), and general health surveillance data (WHO data from the Health Monitoring Information System (HMIS)). See BOX 1.

STEP 2: Selected a set of nutrition-specific questions that were included in the UNICEF PDM and WFP CATI. Example questions can be found in Table 3, more detailed questions can be found in Annex 3.

STEP 3: Conducted Key Information Interviews (KII) that targeted implementing partners and health staff, as a means of triangulating the information obtained on nutrition vulnerabilities, as well as any anthropometric data collected.

STEP 4: Developed an analytical framework to support the analytical process, bringing together all the data and information available at Governorate level. The analysis was conducted through both the food system and the

health system pathways, with a consensus-based approach applied in examining how the drivers of acute malnutrition evolve (BOX 2).

STEP 5: Presented and discussed the analysis results with the Nutrition Cluster members for comments, adjustments, and final endorsement.

STEP 6: Final endorsement of the nutrition vulnerability analysis and conclusions.

BOX 1: Remote assessment methodologies used

- **WFP CATI:** Lists from previous distribution (targeting 70% of the population in Gaza) are used, with a random sample of 500 households targeted each month. Enumerators are trained in the questions, with a sample recorded for quality checks. Nutrition-sensitive indicators were included in 304 households between 22nd – 31st January 2024.
- **UNICEF PDM:** A short SMS-based survey delivered through RapidPro, targeting all recipients who have cashed their transfers at least five days previously. The Cash programme targets pre-crisis poor or vulnerable households with children in the Social Registry of the Ministry of Social Development. On 30th of January 2024, UNICEF launched an SMS-based survey to assess the dietary diversity of young children aged 6–23 months and PBW in Gaza – 2,159 responses were collected on children’s dietary diversity and 742 on PBW dietary diversity.

TABLE 3: NUTRITON QUESTIONS INTEGRATED IN THE WFP CATI and THE UNICEF PDM

| | UNICEF PDM | WFP CATI |
|--|---|--|
| Dietary diversity in children 6–23 months | Yes, with 8 food groups including breastmilk. | Yes, with 17 food groups with breastmilk included as milk. Including nutritious commodities. |
| Dietary diversity in PBWs | Yes, with 7 food groups | No – limited sample |
| Changes in infant feeding practices | No | Yes – as a qualitative indicator only |
| Morbidity in the preceding two weeks in children 6–59 months | No | Yes -diseases included were diarrhoea, ARI, fever, skin infection, vomiting, other |
| Non-trauma related mortality | No | Yes |

BOX 2: Analytical framework methodology

The tool was organised following the existing IPC analytical framework¹ for acute malnutrition. For each of the five governorates of the Gaza Strip, different categories of data were included: demographic, outcome indicators, food consumption and dimensions of food security, care and feeding practices, health status, health services and environmental health, mitigating factors and other qualitative information.

For all available data points, the source and collection date are listed, as these are essential criteria for assessing the reliability of the data.

Reliability scoring

To support a transparent and consistent evidence-based analysis, a reliability scoring method was developed. This method is not based on rigorous statistical analysis but rather on a general assessment of the robustness of the collection methods and indicators and the temporal relevance of the evidence available for the analysis. Three criteria were used to define reliability.

$$\text{Reliability} = (\text{Representation} * \text{Timeliness} * \text{Quality}) / 3$$

- **Representation** is a measure of how well the data accurately reflect the characteristics of the entire population in the context including geographic coverage.
- **Timeliness** is a measure of how recent the data are.
- **Quality** is a measure of the accuracy, precision, and completeness of the data.

Each indicator in the analytical framework was assigned a score between 0 to 1, with the exception of mitigating factors and other qualitative information. The scores were assigned after reviewing the available data, sources, and collection methods by each criterion (representation, timeliness and quality). Thereafter, the overall reliability was scored and defined:

| | |
|----------------------|-----------------------------|
| Reliability <25% | Not reliable/not to be used |
| Reliability 25-50% | Somewhat reliable |
| Reliability 50%-75% | Fairly reliable |
| Reliability 75%-100% | Reliable |

¹ Further definitions and thresholds can be found in Annex 1.

The analysis was an iterative discussion among NIS-E Taskforce members with data validation where possible, until a final consensus on a score was reached. Where classification thresholds existed (dietary diversity, food consumption scores, MUAC), they were applied to the severity level. In the absence of thresholds, consensus was reached on the severity scoring after reviewing all factors.

Severity ranking

A **SEVERITY CLASSIFICATION**¹ made of FIVE levels was developed and aims to inform decision making on the level of nutritional insecurity among children under five and pregnant and breastfeeding women. It represents the final stage of the neutral and unbiased analytical process that relies on a review of available evidence on drivers of acute malnutrition at one point of time.

| Severity ranking |
|---------------------|
| Extremely critical |
| Critical |
| Severe |
| Moderate |
| Low |
| Insufficient sample |

For each available data point, a reliability score and a severity classification were assigned. Both reflect the technical consensus reached by key experts of the Global NIS-E Taskforce with the aim of guiding and informing decision making at all levels.

Limitations

Several limitations were noted and taken into consideration when analysing the results.

Limited available resources. Data and information included in the analysis come from limited available sources. Real-time data collection is extremely challenging in the context of Gaza. As such, the analysis and data presented are not representative of all of Gaza.

Small population sample. Participation in the UNICEF PDM and WFP CATI is based on pre-crisis registration lists and is therefore only representative of those populations. Pre-crisis, WFP provided assistance to approximately 70% of the population prior to this crisis, which was used to conduct the survey.

Unreliable telecommunications. Some data were collected via phone interviews (WFP CATI) and SMS surveys (UNICEF PDM) and are therefore limited by respondent access to a working device and telecommunication services (which are frequently cut).

Accuracy of information. The majority of survey respondents in the WFP CATI were the heads of household and not the caregivers. Heads of households may not have a complete picture of feeding practices, diets and the health status of the households' children, limiting the reliability of the information provided.

Limited screening. Initial data from screenings included in this analysis have the following limitations 1) Only MUAC is used in the screenings; 2) Screenings were conducted with children accessing routine immunization services in health facilities or shelters; 3) The data collected were primarily among children 6–23 months of age as associated with immunization activities; and 4) The data are not representative of all of Gaza as they came from only a limited number of shelters.



ANALYSIS OF RESULTS

Information on nutrition outcomes in Gaza remains scarce due to restricted access and a lack of trained nutrition personnel. This limits the ability to determine to what extent the overall nutritional status has deteriorated since the beginning of the recent conflict. However, information compiled from the drivers of acute malnutrition, namely through the food security and health pathways, highlights a worsening situation that will inevitably lead to an increase in acute malnutrition, chronic malnutrition and micronutrient deficiencies. The increase in diseases and diarrhoea has direct implications on the nutritional status of children under 5 as well as other vulnerable populations.

While the groups most vulnerable to malnutrition remain infants and neonates, children under 5 and pregnant and breastfeeding women, additional at-risk groups include those with chronic diseases,²³ children with pre-existing morbidities, and those recovering from traumatic injuries. (Source: KII GHC, KII NNGO, KII IMC). It is therefore vital these groups are included in the nutrition response.

Four types of Information were collected: change in diets, exposure to infectious diseases, anthropometry where available, and access to safe, clean water and sanitation. Each piece of information has been analysed for its impact on child wasting, across all governorates of Gaza.

Change in diets and access to food

Data collected indicates that the dietary diversity of children aged 6–23 months is extremely low, with more than 90% eating 2 food groups or less in the 24 hours preceding the survey (WFP CATI, UNICEF PDM) (Figure 1a). According to UNICEF PDM results, out of the 743 pregnant and breastfeeding women surveyed, and 613 responses received, 95% had consumed two or fewer food groups in the preceding 24 hours (Figure 1b). At the end of December 2023, UNICEF PDM showed that more than three-quarters of children had eaten at least two food groups the previous

day; that number is now down to one-third. See Figure 2 and 3 below for details on the food groups consumed by children and pregnant and breastfeeding women in the previous 24 hours.

In addition, more than 95% of households who responded (N=304) to the Food Consumption Score (FCS) in the WFP CATI, stated they have been limiting the number of meals or reducing portion sizes. Most households reported eating between one meal (64%) or two meals (33%) a day, highlighting the precarious food security situation (WFP CATI). This was confirmed by key informants who reported many adults are foregoing food for their children (Source: KII NNGO), a practice that has generational impacts for the children of pregnant and breastfeeding women. This practice was corroborated by similar questions in the FCS, where in the last seven days, adults in more than 95% of households restricted food consumption for small children to eat (WFP CATI, January 31st). The repercussions of the lack of dietary diversity and reduced consumption on micronutrient status, in a population already experiencing a high prevalence of anaemia in pregnant and breastfeeding women, is likely to lead to low birth weights and negatively impact the nutritional status of infants.

Information on infant feeding practices was qualitative in nature and changes in feeding practices was indicated. This is in line with information on the lack of available infant formula in markets; the high use of bottle feeding prior to the crisis; and psychological factors that impede many mothers' ability to breastfeed. Questions on infant formula indicate that some households are either reducing the quantity of formula used in each bottle feed or reducing the number of feeds given. A few respondents stated that they are starting to give infants other milk (cow or powdered) or introducing family foods early, which has been echoed in KII. These KII highlighted that "even if a child starts with infant formula, the same type of formula might not be

Figure 1a.
Children 6–23 months,
diet diversity
(Source: UNICEF PDM)

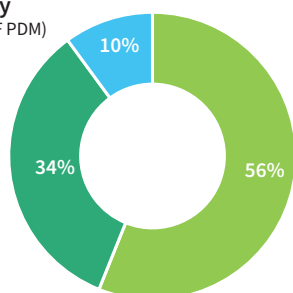
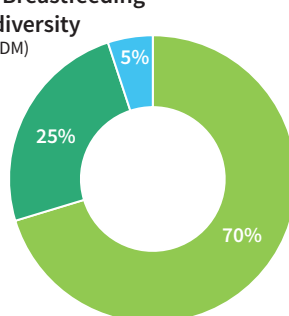


Figure 1b.
Pregnant and Breastfeeding
women, diet diversity
(Source: UNICEF PDM)



● 1 Food group
● 2 Food groups
● 3 Food groups and more

23 For example, those with diabetes, cancer, or renal impairment from phenylketonuria, etc.

Figure 2.
Children 6–23 month – Major food groups consumed in the preceding 24 hours
 (Source: UNICEF PDM)

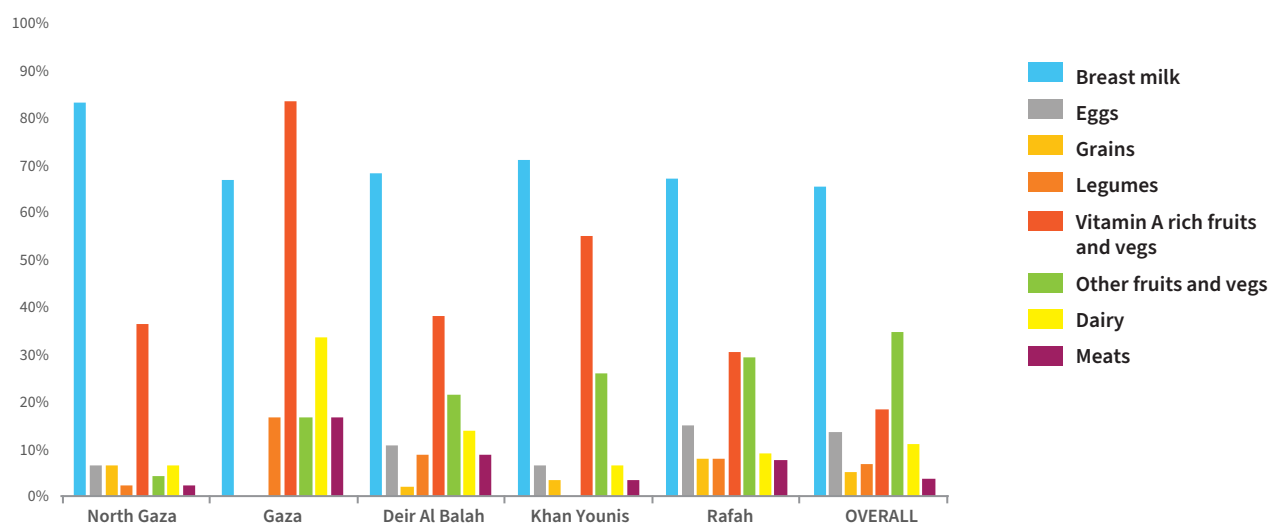
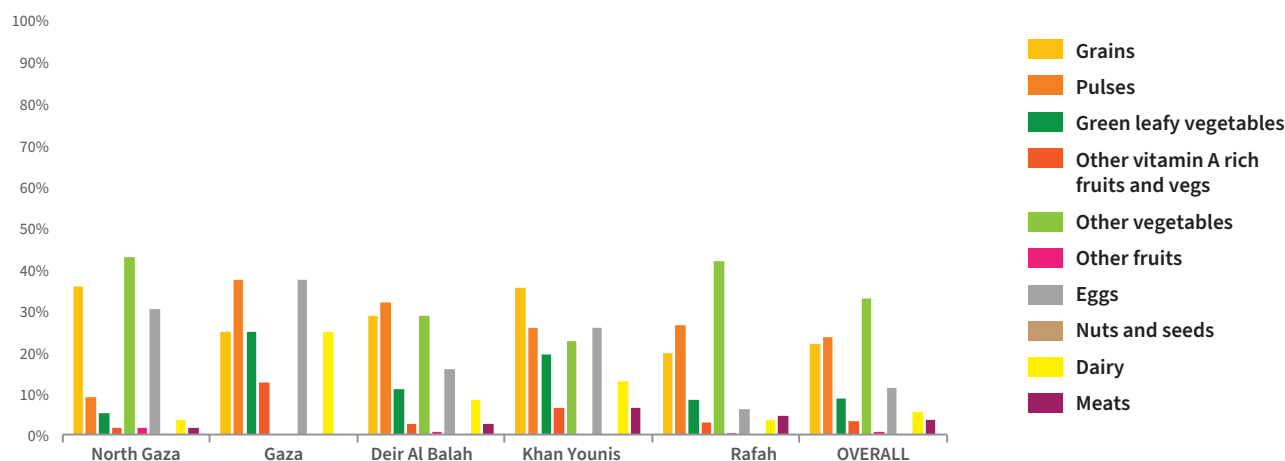


Figure 3.
Pregnant and Breastfeeding women – Major food groups consumed in the preceding 24 hours
 (Source: UNICEF PDM)



available the following week and therefore they have to change each time”, to a formula which may not correspond to age-category (KII HW). Infant formula was often mentioned as a “need” in the CATI survey, where a question was included to determine the needs of households. While infant feeding is concerning, so are the feeding practices of weaning children. As one interviewee stated “parents mentioned that they’re not adequately feeding their infants as they should. They’re saying there’s a problem with access to food. Either it’s very expensive or the foods are not available wherever they are” (KII IMC).

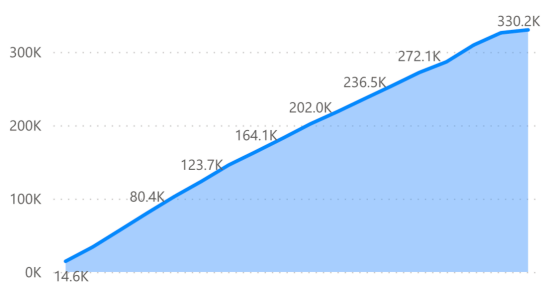
The CATI survey results indicate that the overall food security situation is extremely critical, with 99.3% of households indicating the need for food. Food insecurity has a direct impact on children under 5 as well as PBW and leaves them vulnerable to acute malnutrition with generational repercussions.

Exposure to infectious disease

The collective health of the population has severely deteriorated throughout the Gaza Strip due to the collapse of systems, limited access to clean water, overcrowded living conditions, poor sanitation and decreased dietary diversity. The WFP CATI survey found that 93% of children under 5 had one or more diseases (such as fever, vomiting, skin infections or ARI) in the two past weeks, and more than 70% had diarrhoea. This indicates an extremely critical situation, and points to a high risk for nutritional deterioration in this age group. In addition, almost 60% of children under 5 had experienced ARI within the two weeks prior to the survey. This high disease prevalence is confirmed by WHO, which reported as of January 30th, a total of 85,410 diarrhoea cases among children under 5, a 23-fold increase from the 2022 baseline.²⁴ The risk of disease outbreak, especially severe diarrheal disease

24 WHO - oPT Emergency Situation Update, January 30th, 2024.

Acute Resp. Infection



Acute Watery Diarrhea

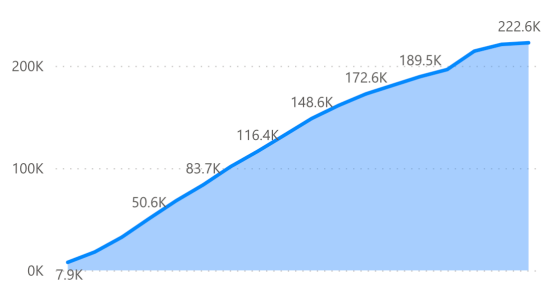
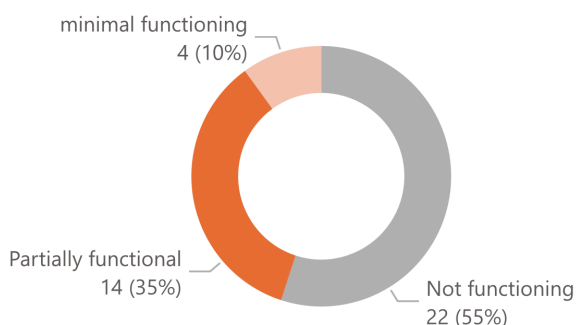


Figure 4:
Gaza disease surveillance (entire population groups) – Global Health Cluster, February 13, 2024

Hospitals Functionality*



PHCs Functionality*

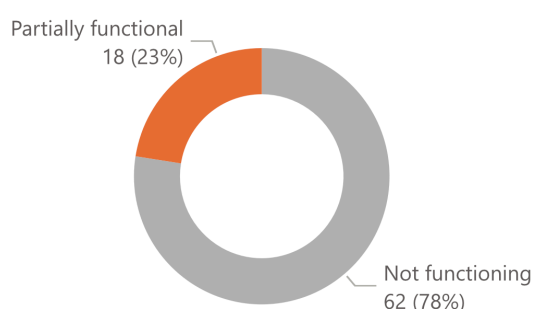


Figure 5:
Health Service Points – Global Health Cluster, February 13, 2024

as well as respiratory infections, is very high in contexts where healthcare systems have broken down and extreme environmental hazards are present.

As figure 4 above shows, the number of reported cases of Acute Watery Diarrhoea and Acute Respiratory Infections in the general population has drastically increased since the start of current hostilities.²⁵ While both hospitals and Primary Healthcare Facilities (PHCs) indicate an extremely critical situation – only 31% of hospitals partially functional and 23% of PHCs partially functioning across the Gaza Strip – it is expected that these figures reflect only a small proportion of existing cases (Figure 5). In Gaza, hospitals are flooded with wounded, and the number of patients awaiting treatment was at 150% capacity in November.²⁶

The health situation in Gaza is precarious and will have a direct impact on children under 5, as well as pregnant and breastfeeding women. Many are left vulnerable to acute malnutrition, while in turn, malnutrition could exacerbate the severity of infectious diseases, and without attention, could lead to significant morbidity and mortality in children under 5.

Anthropometric measures

It is important to note the limitations of the available anthropometric data. Screenings for acute malnutrition among children under 5 have begun, however, they are limited in scale and geographic distribution. MUAC screening has primarily been conducted at health service points, or in combination with immunization activities, and therefore mainly targeted to children aged 6–23 months. This limits the representative data to younger children attending immunization clinics, and to those able to seek health care. The Nutrition Cluster is working with partners to include screenings at more diverse sites where possible, including shelters. Data validation is an ongoing activity and will continue to expand as raw data become available. No anthropometric data are available on the nutritional status of pregnant and breastfeeding women – however, the International Medical Corp (IMC) commenced screening activities in January 2024. Likewise, there are no recent data on micronutrient deficiencies, however, it is likely that deficiencies will or already have increased, given what is known about the reduced food consumption and high levels of food insecurity.

²⁵ Health Cluster. Occupied Palestinian territory.

²⁶ Public Health Situation Analysis on Hostilities in the occupied Palestinian territory, 05 November 2023. Health Cluster. World Health Organization.

Compounding factors and additional information

Many reports have highlighted water scarcity. While the reliability of self-reporting can be called into question, the information obtained through the CATI surveys indicates an extremely critical situation. Access to safe and clean water is reported as being less than a litre per person per day for the average household. This is an insufficient quantity, even if that water were only for drinking. In the CATI survey, 81% of households reported needing drinking water, which is likely to continue to impact the health situation. More than 60% of surveyed households (CATI) indicated having health and psychological needs.

Almost 20% in the limited sample of children aged 6–23 months had received specialised nutritious foods such as LNS-MQ, RUTF and others (WFP CATI). KIIs highlight that there needs to be some form of “community awareness” as many are “treating it as a snack that is given to young kids, with mothers [PBWs] not consuming it” (KII NNGO). The lack of knowledge of these products leads to many nutritious products “getting sold”. In the interviews it was acknowledged that this is challenging as currently “there’s no space to conduct these sessions” to inform pregnant and breastfeeding women on the benefits of consuming the nutritious foods mentioned above (KII NNGO).



GEOGRAPHICAL ANALYSIS

The lack of information available for North Gaza, Gaza City and Khan Younis remains a major concern, particularly given the lack of humanitarian access and assistance that continues to impact these areas. For Deir al-Ballah and

Rafah governorates, more data have been analysed. They show that the situation is already extremely critical, despite the limited humanitarian assistance provided, and reflect the extreme conditions the population is facing.

North Gaza

TABLE 4: NUTRITION DRIVERS IN NORTH GAZA

| | Anthropometric measures (Children 6–59m unless indicated otherwise) | Dietary Diversity in Children 6–23m | Dietary diversity in PBW |
|----------------------------------|--|---|--|
| Severity Scoring and data | Extremely Critical Children 6–24 m. n=1539, at vaccination sites MUAC-for-Age: 15.6% ²⁷ GAM [95% CI: 13.9 – 17.5] 2.9% SAM [95% CI: 2.1 – 3.8] | Extremely Critical 79% consume ≤2 food groups (UNICEF PDM, n=58) | Extremely Critical 95% consume ≤2 food groups (UNICEF PDM, n= 56) |
| Reliability Scoring | Fairly reliable ²⁸ | Fairly reliable | Fairly Reliable |

27 Excluding MUACZ flags (+/- 4 SD). Quality checked and cleared.

28 Details of all the reliability scoring can be found in Annex 4

UNICEF PDM survey gathered responses on the diet diversity for 47 children aged 6–23 month in North Gaza (Table 5). Results show that 98% had consumed two or fewer food groups in the 24 hours preceding the survey. Among the main food groups reported, breast milk was mentioned for 39 children (83%), and eggs for 17 (36%). The consumption of all the other food groups, such as legumes, vitamin A rich fruits and vegetables, other vegetables, grains, meat and dairy products, had almost completely disappeared from their daily diet, indicating an extremely worrying situation in terms of diet quality.

Out of the 56 responses received from pregnant and breastfeeding women, 95% had consumed two or fewer food groups the previous day. The main food groups (see Annex 2) mentioned were non-vitamin A rich vegetables (24 affirmations), grains (20) and eggs (17). This situation highlights critically insufficient micronutrient intake before and during pregnancy and breastfeeding, which can affect both the women and the development of their infants.

The sample reached by the WFP CATI (N=4 HH with no children under 5) was insufficient for any analysis related to child health status and household access to clean water. However, KIIs with relatives in North Gaza highlighted that ‘instead of water that they are boiling is not clean. They drink rainwater and sometimes have to go get water from the sea’, further highlighting the fragile living situation (KII HW).

In this governorate, one national NGO carried out MUAC screenings in January 2024. Screenings were conducted with 1,546 children aged 6–24 month while they received routine immunization services at two shelters and two health facilities. Following a quality check assurance exercise, among the children surveyed, GAM is 15.59% (95%CI: 13.9 – 17.5), including 2.85% severe acute malnutrition (SAM) (95% IC: 2.1 – 3.8). These data show an already extremely urgent nutritional situation, with 1 in 6 children (aged 6–23m) acutely malnourished.

Humanitarian partners’ ability to respond to extensive needs in North Gaza is heavily constrained,²⁹ and basic services have collapsed (there is no access to clean water in the northern governorates,³⁰ 100% of the five hospitals were damaged in late November 2023, and 100% of the 12 PHCs are not functioning³¹). The nutrition situation is likely to continue to worsen and quickly.

Gaza City

TABLE 5: NUTRITION DRIVERS IN GAZA CITY

| | |
|----------------------------------|---|
| | Water and sanitation access |
| Severity Scoring and data | Extremely Critical 0.66L pppd self-reported (WFP CATI, n= 28) |
| Reliability Scoring | Somewhat Reliable |

In Gaza city, neither the WFP CATI nor the UNICEF PDM surveys were able to reach a sufficient sample of children under 5 or pregnant and breastfeeding women to conduct any analysis on the diet diversity and health conditions. However, from the 28 households interviewed through the CATI, the average household only has access to 0.66 litres of clean water per person per day. All (100%) of the households surveyed reported having food needs, 96% water needs, 89% hygiene items, 82% shelter, 75% psychosocial support and 71% health assistance, indicating an extremely critical situation for the population in Gaza City. As in North Gaza, humanitarian access is largely constrained, and as a result, only four households reported having received food parcels, while 24 had not yet received any humanitarian assistance. While access to basic services such as health is completely hampered (as of November 28, 2023, 16 out of 19 hospitals and 18 out of 21 PHCs were not functioning³²), without a ceasefire to allow the flow of humanitarian aid to meet the population’s basic needs, the nutritional situation is likely to deteriorate rapidly.



29 In January 2024, 56% of aid missions planned for the North of Wadi Gaza were denied access by the Israeli military (Hostilities in the Gaza Strip and Israel - reported impact, 6 February 2024)

30 OCHA - Hostilities in the Gaza Strip and Israel - reported impact, 7 February 2024

31 WHO - Impact of health attacks in the Gaza Strip (Update 28 November 2023)

32 WHO - Impact of health attacks in the Gaza Strip (Update 28 November 2023)

Deir al-Balah

TABLE 6: NUTRITION DRIVERS IN DEIR-AL-BALAH

| | Dietary Diversity in Children 6–23m | Dietary diversity in PBW | Children reporting one or more diseases in preceding 2 weeks | ARI (U5) in preceding two weeks | Diarrhoea (U5) in preceding two weeks | Other diseases | Water and sanitation access |
|----------------------------------|---|--|---|--|--|---|---|
| Severity Scoring and data | Extremely Critical 86% consume ≤2 food groups (UNICEF PDM, n=103) | Extremely Critical 93% consume ≤2 food groups (UNICEF PDM, n= 119) | Extremely Critical 97% had one or more diseases (CATI, n= 34) | Critical 55.9% (CATI, n= 34) | Extremely Critical 70% (CATI, n= 34) | Extremely Critical Fever: 82% Skin infection: 18% Vomiting: 56% (WFP CATI, n= 34) | Extremely Critical 0.94L pppd self-reported (WFP CATI, n= 49) |
| Reliability Scoring | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Somewhat Reliable |

In Deir a-Balah, the UNICEF PDM survey was able to reach 137 individuals, of which 103 have children aged 6–23 months. Among those young children, 86% were found as having eaten two or fewer food groups during the day before the survey, while only 3% had consumed five food groups (Table 6). The food groups most consumed were breastmilk (70 affirmations), followed by eggs (39) and grains (22). Among pregnant and breastfeeding women, and out of the 119 responses analysed, results show that 67% consumed only one food group the day preceding the survey, while 26% consumed two food groups. Pulses (38), grains and other vegetables (34) were the food groups most frequently mentioned by respondents.

Regarding health conditions, the WFP CATI survey found that more than 97% of children under 5 reported having had one or more diseases in the 2 past weeks. Out of 34 children under 5, 19 (55.9%) had experienced ARI within the past two weeks, 70.5% had experienced diarrhoea, and 82.3% had a fever. This shows the extremely critical health conditions children face, exposing them to high-risk nutritional deterioration. Trends from WHO corroborate those findings, showing a 55% increase in diarrhoea cases in children under 5 between November and December 2023.

While the three hospitals in the governorate of Deir al-Balah were still operational in late November, nine of the 16 PHCCs were no longer functioning,³³ seriously impeding access to health services. In addition, results from the CATI survey showed that on average, 0.49 litres of drinking water was available per person per day in the 49 households surveyed, which is far from the minimum humanitarian standard (15L/person/day).³⁴ The scale of needs is staggering with 100% of the 49 households in need of food and hygiene items, 78% in need of water, 69% shelter and 65% health assistance. Even, if according to the CATI survey, 34 HH have received humanitarian aid (27 HH received food parcels, five received cooked meals, one received uncooked meals and one was provided with cash), the level of deprivation is extremely worrying, and the nutritional situation of children under 5 and pregnant and breastfeeding women is at major risk.

33 WHO - Impact of health attacks in the Gaza Strip (Update 28 November 2023)

34 Patel and Chaudhury (2019). Revisiting the Sphere standards: comparing the revised Sphere standards to living standards in three urban informal settlements in Nairobi, Kenya

Khan Younis

TABLE 7: NUTRITION DRIVERS IN KHAN YOUNIS

| | Dietary Diversity in Children 6–23m | Dietary diversity in PBW |
|----------------------------------|---|---|
| Severity Scoring and data | Extremely Critical 85% consume ≤2 food (UNICEF PDM, n=33) | Extremely Critical 91% consume ≤2 food groups (UNICEF PDM, n= 31) |
| Reliability Scoring | Fairly Reliable | Fairly Reliable |

In Khan Younis, the dietary diversity of children aged 6–23 months (N=31) and pregnant and breastfeeding women (N=31) was measured using the UNICEF PDM. The results, in Table 7 above, show that 85% of young children and 91% of pregnant and breastfeeding women consumed two food groups or fewer in the last 24 hours, which is an extremely critical situation. For young children, the food groups most

frequently mentioned were breastmilk (22 affirmations) and eggs (17), while grains (11), pulses and eggs (8) were the food groups most frequently mentioned for pregnant and breastfeeding women. The WFP CATI sample was insufficient to conduct any analysis on health conditions in children under 5, as well as on household access to clean water.

Rafah

TABLE 7: NUTRITION DRIVERS IN RAFAH

| | Anthropometric measures (Children 6–24m) | Dietary Diversity in Children 6–23m | Dietary diversity in PBW | Children reporting one or more diseases in preceding 2 weeks | ARI (U5) in preceding two weeks | Diarrhoea (U5) in preceding two weeks | Other diseases | Water and sanitation access |
|----------------------------------|---|--|--|--|---|--|--|--|
| Severity Scoring and data | Low MUAC-for-Age ³⁵ : 4.8% ³⁶ [95%CI: 3.5 – 6.5] 1.0% [95%CI: 0.5 – 1.9] | Extremely Critical 72% consume ≤2 food groups (UNICEF PDM, n=334) 88% consume ≤2 food groups (WFP CATI, n=69) | Extremely Critical 97% consume ≤2 food groups (UNICEF PDM, n= 301) | Extremely Critical 93% had one or more diseases (CATI, n= 162) | Critical 59.8% (CATI, n= 162) | Extremely Critical 70% (CATI, n= 162) Data from the MoH (WHO data) highlight an increase observed | Extremely Critical Fever: 79% Skin infection: 15% Vomiting: 55% (WFP CATI, n= 162) | Extremely Critical 0.94L pppd self-reported (WFP CATI, n= 219) |
| Reliability Scoring | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable | Fairly Reliable |

In Rafah, where most of the Gaza’s population is now concentrated, both WFP CATI and UNICEF PDM surveys reached sufficient sample size for the analysis of diet diversity in children aged 6–23 months with a sample of 68 (CATI) and 270 (PDM) (Table 7). According to results from the CATI, 88% of young children had consumed two or fewer food groups within the past 24 hours, while in the UNICEF PDM, this proportion was at 89%. Based on PDM results, breastmilk (181 affirmations), eggs (82) and grains (79) were the main food groups consumed by young

children. The PDM survey results show that among 299 pregnant and breastfeeding women, only 3% had eaten more than two food groups in the last 24 hours.

According to KIIs “one major complaint from so many of the parents is the lack of food for their children, while pregnant and breastfeeding women are not getting their iron and folic acid” (KII IMC).

Humanitarian assistance in Rafah, while remaining at an insufficient scale compared to the needs, is higher than

35 MUAC screening conducted by UNRWA in Children 6–24 months coming for vaccination at the health centres in shelters. (n=812). January 2023

36 Excluding MUACZ flags (+/- 4 SD). Quality checked and cleared.

in other parts of the Gaza strip. From the 219 households interviewed through the WFP CATI assessment, 76% had received some form of humanitarian assistance with food parcels forming the bulk of assistance (70%). Furthermore, about a fifth of children according to the CATI had consumed a nutritious product in the preceding 24 hours.

From the WFP CATI, the analysis showed extreme health conditions with almost 93% children under 5 having one or more disease within the past two weeks, 79% had a fever and 56% had experienced vomiting. The level of diarrhoea is extremely critical with 70% of children under 5 having one episode in the past two weeks, and almost 60%

experienced ARI. The CATI revealed that on average, only 0.94L of clean water is available per day per person.

UNRWA has started screenings at two health facility sites in shelters, targeting children coming for vaccination, mainly under 2 years old. Out of 812 children under 2 screened, results showed a GAM prevalence of 4.8% (95% CI: 3.5 – 6.5), including 1.0% SAM (95%CI: 0.5 – 1.9). Other partners started screening activities at the hospital level, however these were children who are already sick, and therefore not included in the analysis as it biases the results. Nonetheless, those preliminary results were an indication of how rapidly things will decline if humanitarian access is not fully allowed.





EVOLVING SCENARIO AND TWO POSSIBLE OUTLOOKS

Two scenarios were defined to describe the plausible deterioration of the nutrition situation in the Gaza Strip based on specific triggers that may impact the nutrition status of children under 5 and pregnant and breastfeeding women in the coming weeks.

1. Rapid decline in the nutrition situation

In this scenario, **infectious diseases, lack of access to health services and unacceptable WASH conditions are triggers for the rapid increase in the prevalence of acute malnutrition** in the most at-risk populations. Food insecurity is considered as a continuous stress or pressure impacting the entire population. The collapse of health and WASH systems, coupled with mass displacement and overcrowding in the camps, are all conditions which can result in a quick deterioration of the health and nutrition status of a population – particularly among young children. Sufficient and accessible humanitarian assistance can serve as a protective factor through the provision of food aid and supplementary nutrient-dense foods for children under 5, pregnant and breastfeeding women and other vulnerable populations.

Areas with very limited humanitarian access: North Gaza, Gaza City, Khan Younis and Deir-al-Balah

The underlying and basic causes of acute malnutrition in these areas have already reached extremely critical levels. The conflict has affected these areas the longest and has resulted in widespread loss of infrastructure and access to basic services, all which impact the nutritional status among young children and pregnant and breastfeeding women in these governorates. In addition, pregnant and breastfeeding women are reducing their food intake to protect their children, which increases the risks of acute malnutrition among pregnant and breastfeeding women with impacts on newborns. Furthermore, the lack of access to adequate care and nutrition places pregnant and breastfeeding women at high risk of pregnancy complications and maternal and neonatal mortality and morbidity.

Without scaled up humanitarian aid and access to address food security, WASH, health, and shelter, a continued nutritional deterioration is expected in children under 5, pregnant and breastfeeding women, and other vulnerable groups in these areas.

2. Slow, and continuous nutrition deterioration in population

In this scenario, food insecurity remains a severe stress or pressure for a potential nutrition deterioration. However, if health conditions do not rapidly deteriorate, **the nutritional situation might see a slow, continuous deterioration**, in the most at-risk populations, such as infants, young children, and pregnant and breastfeeding women. Humanitarian aid and support for basic services can help mitigate the rapidity and scale of deterioration.

In summary, the deterioration of nutrition status, and increased risk of acute malnutrition in children is influenced by humanitarian access.

- Areas with very limited to no humanitarian assistance, and a high disease burden and food insecurity, are likely to experience a rapid deterioration in the nutritional status of children under 5, pregnant and breastfeeding women. Cumulative exposure to the drivers of acute malnutrition is the highest in the Northern governorates.
- In areas with more, yet limited humanitarian access, the speed and scale of deterioration may be slower, resulting in a slow, persistent increase in the prevalence of all forms of malnutrition.

With limited or no access to humanitarian assistance, a fast and rapid deterioration in the nutrition status women, infants and children under 5, resulting in wasting and risk of death is most likely.

Areas with humanitarian access: Rafah

As seen in the governorates to the north, the underlying and basic drivers of acute malnutrition are at extremely critical levels. While food assistance is more available in this governorate, food insecurity remains an extreme pressure on the population especially among young children and pregnant and breastfeeding women who are consuming limited quantity and quality of food. Access to health services is constrained by the number of displaced persons in a small area, a lack of facilities, and the burden of addressing the high level of trauma needs. **The minimal access to humanitarian aid has delayed a rapid nutrition deterioration**, however there are indications that the population is highly vulnerable with little to no capacity to withstand new or continued shocks. A slow and continuous deterioration is expected in this area if humanitarian assistance remains at the same scale, and in the absence of major disease outbreaks or an increase in conflict.

If attacks persist or escalate in Rafah and humanitarian access becomes increasingly restricted, the nutrition situation is likely to experience a severe, rapid decline. Health conditions would likely rapidly deteriorate due to the overcrowded and challenging living circumstances, creating a tinder-box condition for an epidemic to occur. In the case of an escalation of fighting in Rafah, resulting in restricted humanitarian access, further reduced food security and an increase in infectious diseases, there would likely be a swift deterioration of the overall nutritional status of the population, particularly if the displaced cannot relocate to a safer location.





















ANNEXES

Annex 1 – Severity Classification

| GAZA – Nutrition Insecurity Scale for “Severity Classification” | | Description |
|--|---|---|
| <p>Purpose: Score each indicator in different phases based on a review of available evidence on drivers of acute malnutrition at one point of time. It aims to inform decision making on the level of nutrition insecurity among children under 5 and pregnant and breastfeeding women and should reflect the technical consensus reached by key experts from multi-agency and multi-sectors.</p> | | |
| Extremely critical | Immediate driver: Diet Diversity in children 6–23m and PBWs | The diet diversity of children under 5 and pregnant and breastfeeding women shows that more than 70% are consuming less than 2 food groups in the preceding 24 hours, and/or more than 90% are consuming less than 4 food groups. |
| | Immediate driver: Diarrhoea and ARI in U5 children | Level of disease (diarrhoea, acute respiratory infections or other diseases) in children under 5 is reported as above 70% over a 2-week period. |
| | Basic and underlying drivers of acute malnutrition: Access to clean water (HH) | Level of access to clean water at household level is below 15L per person and day (WASH emergency minimum standard: 15L/Person/Day). |
| | Nutrition outcome: Anthropometric measures (MUAC) | MUAC measurement of moderate and severe acute malnutrition (GAM) in children 6–59 month is $\geq 15\%$. If data are available only for children 6–23 month, their specific vulnerability is taken into account, considering that this age group usually has 3 times higher levels of GAM as compared to children 24–59 month. |
| Critical | Immediate driver: Diet Diversity in children 6–23m and PBWs | The diet diversity of children under 5 and pregnant and breastfeeding women shows that more than 80% are consuming less than 4 food groups in the preceding 24 hours. |
| | Immediate driver: Diarrhoea and ARI in U5 children | Level of disease (diarrhoea or acute respiratory infections) in children under 5 is reported as between 50–70% over a 2-week period. |
| | Basic and underlying drivers of acute malnutrition: Access to clean water (HH) | Level of access to clean water at household level is below 15L per person and day (WASH emergency minimum standard: 15L/Person/Day) |
| | Nutrition outcome: Anthropometric measures (MUAC) | GAM by MUAC measurement in children 6–59 month is between 10–14.9%. If data are available only for children 6–23 month, their specific vulnerability is taken into account, considering that this age group usually has 3 times higher levels of GAM as compared to children 24–59 month. |
| Severe | Immediate driver: Diet Diversity in children 6–23m and PBWs | The diet diversity of children under 5 and pregnant and breastfeeding women shows that btw 50–80% are consuming less than 4 food groups in the preceding 24 hours. |
| | Immediate driver: Diarrhoea and ARI in U5 children | Level of disease (diarrhoea or acute respiratory infections) in children under 5 is reported as between 30–50% over a 2-week period. |
| | Nutrition outcome: Anthropometric measures | GAM by MUAC measurement in children 6–23 month is between 10–14.9%. If data are available only for children 6–23 month, their specific vulnerability is taken into account, considering that this age group usually has 3 times higher levels of GAM as compared to children 24–59 month. |

| | | |
|----------------------------|--|--|
| Moderate | Immediate driver: Diet Diversity in children 6–23m and PBWs | The diet diversity of children under-5 and pregnant and breastfeeding women shows that btw 20–50% are consuming less than 4 food groups in the preceding 24 hours. |
| | Immediate driver: Diarrhoea and ARI in U5 children | Level of disease (diarrhoea or acute respiratory infections) in children under 5 is reported as between 15–30% over a 2-week period. |
| | Nutrition outcome: Anthropometric measures | GAM by MUAC measurement in children 6–23 month is between 5–9.9%. If data are available only for children 6–23 month, their specific vulnerability is taken into account, considering that this age group usually has 3 times higher levels of GAM as compared to children 24–59 month. |
| Low | Immediate driver: Diet Diversity in children 6–23m and PBWs | The diet diversity of children under-5 and pregnant and breastfeeding women shows that below 20% are consuming less than 4 food groups in the preceding 24 hours. |
| | Immediate driver: Diarrhoea and ARI in U5 children | Level of disease (diarrhoea or acute respiratory infections) in children under 5 is reported as between 0–20% over a 2-week period. |
| | Nutrition outcome: Anthropometric measures | GAM by MUAC measurement in children 6–59 month is <5%. If data are available only for children 6–23 month, their specific vulnerability is taken into account, considering that this age group usually has 3 times higher levels of GAM as compared to children 24–59 month. |
| Insufficient sample | | The sample is insufficient, and the indicator has been scored as “unreliable”. No severity score is applied. |

Annex 2 – Food groups in Children 6–23 months and Pregnant and Breastfeeding women

| Children 6–23 month | | Pregnant and breastfeeding women | |
|---|--|---|--|
|  | Breast milk |  | Grains, roots and tubers (wheat, oats, bulgur) |
|  | Legumes, nuts and seeds (Beans, lentils, chickpeas, fava beans, pistachios, hazelnuts) |  | Pulses (beans, peas, lentils, chickpeas) |
|  | Vitamin A-rich fruits and vegetables (sweet potatoes, carrots, beets) |  | Leafy vegetables (parsley, molokhiya, spinach and lettuce) |
|  | Other fruits and vegetables (e.g., cucumbers, tomatoes, grapes, dates, and figs) |  | Vitamin A-rich fruits and vegetables (sweet potatoes, carrots, beets) |
|  | Eggs |  | Other vegetables |
|  | Grains, roots, bread or flour and tubers (wheat, oats, bulgur) |  | Other fruits |
|  | Dairy products (Milk, yogurt, cheese) |  | Eggs |
|  | Flesh foods (Meat, fish, poultry) |  | Nuts and seeds (pistachios, hazelnuts, almonds, walnuts) |
| | |  | Dairy (Milk, yogurt, cheese) |
| | |  | Meat, poultry, and fish (such as meat, fish and poultry or canned meat, fish and poultry organ meat) |

Annex 3 – Discussions in the NIS-E Expert Group concluded the below list of questions to be integrated and tested in the 2 different assessments

| WFP CATI | UNICEF PDM (RapidPro) |
|---|--|
| <p>(To be included)</p> <p>Are there any children 6–23 months in your household? YES/NO</p> <p>If YES, what foods were they fed in the previous day? (Choose all apply)</p> <ul style="list-style-type: none"> a. Nutritious commodities (LNS, RUTF) b. Rice, porridge, wheat c. Legumes d. Fish e. Eggs f. Red meat g. White meat h. Offal's, Liver i. Milk and dairy products (including breastmilk) j. Fat, oils, k. Fruit rich in VitA l. Other fruits m. Orange vegetables n. Green vegetables o. Other vegetables p. Sugar q. Tea, Coffee | <p>(Already included)</p> <p>Are there any children 6–23 months in your household? YES/NO</p> <p>If YES, what foods were they fed in the previous day? (Choose all apply)</p> <ul style="list-style-type: none"> a. Breast milk b. Legumes, nuts and seeds (Beans, lentils, chickpeas, fava beans, pistachios, hazelnuts) c. Vitamin A-rich fruits and vegetables (sweet potatoes, carrots, beets) d. Other fruits and vegetables (e.g., cucumbers, tomatoes, grapes, dates, and figs) e. Eggs f. Grains, roots, bread or flour and tubers (wheat, oats, bulgur) g. Dairy products (Milk, yogurt, cheese) h. Flesh foods (Meat, fish, poultry) |
| <p>PBW not recommended to include in the CATI as it is at household level and might not reflect changes in PBW diet. As it is already included in UNICEF PDM, it was advised to keep it through the RapidPro only.</p> | <p>(Already included)</p> <p>Yesterday, did the pregnant/lactating women in your household eat any of the following? (Select all that applies) (asked only if applicable)</p> <ul style="list-style-type: none"> a. Grains, roots and tubers (wheat, oats, bulgur) b. Pulses (beans, peas, lentils, chickpeas) c. Leafy vegetables (parsley, molokhiya, spinach and lettuce) d. Vitamin A-rich fruits and vegetables (sweet potatoes, carrots, beets) e. Other vegetables f. Other fruits g. Eggs h. Nuts and seeds (pistachios, hazelnuts, almonds, walnuts) i. Dairy (Milk, yogurt, cheese) j. Meat, poultry, and fish (such as meat, fish and poultry or canned meat, fish and poultry organ meat) |

| WFP CATI | UNICEF PDM (RapidPro) |
|--|--|
| <p>(To be included)</p> <p>Are there any children under 6-months in your household? YES/NO</p> <p>If YES, has the caregiver changed anything in how they feed the child in the last month</p> <ul style="list-style-type: none"> a. Decrease in quantity of infant formula powder used each day. b. Decrease in the number of bottle feeds in a day. c. Stopped using infant formula. d. Started breastfeeding as had no infant formula. e. Stopped breastfeeding. f. Use packet milk/powdered milk/cow milk/goat milk instead of infant formula. g. Started feeding the child family foods. h. Other (please specify) _____ | <p>Not included in UNICEF PDM</p> |
| <p>(To be included)</p> <p>Are there any children under 5 years in your household? YES/NO</p> <p>If YES, have any of them been sick in the last two weeks? If YES, with what? (Tick all that apply)</p> <ul style="list-style-type: none"> a. Fever b. Diarrhoea c. Acute Respiratory Infection d. Skin infection e. Vomiting f. Other... | <p>Not included in UNICEF PDM</p> |
| <p>(To be included)</p> <p>Have there been any deaths in your household since October 7th? YES/NO</p> <p>If YES, were any of the deaths among children under-5 years? YES/NO</p> <p>If yes, how many deaths were there? _____</p> <p>How many of these deaths were from illness or disease? _____</p> | <p>Not included in UNICEF PDM</p> |

ANNEX 4: Reliability scoring for all available data

Rafah

- Dietary Diversity in children 6–23m:
 - ✦ WFP CATI: **The reliability score was established at 59%**, with a MEDIUM representation and quality, and a VERY HIGH Timeliness.
 - ✦ UNICEF PDM: **The reliability score was established at 69%**, with a VERY HIGH representation and timeliness, and a MEDIUM quality.
- Dietary diversity in PBW: **The reliability score was established at 69%**, with a VERY HIGH representation and timeliness, and a MEDIUM quality.
- Morbidity in preceding two weeks: **The reliability score was established at 73%**, with a representation qualified as HIGH, a timeliness as VERY HIGH and a quality as HIGH.
- Clean water access: **The reliability score has been established at 69%**. The sample of households on water access was considered as HIGH representation, and the timeliness established as VERY HIGH with quality classified as LOW.

North Gaza

- Dietary Diversity in children 6–23m: **The reliability score was established at 64%**, with a HIGH representation, a VERY HIGH timeliness, and a MEDIUM quality.
- Dietary diversity in PBW: **The reliability score was established at 66%**, with a VERY HIGH representation and timeliness, and a MEDIUM quality.

Gaza City

- Clean water access: **The reliability score has been established at 44%**. The sample of households on water access was considered as LOW representation, and the timeliness established as VERY HIGH with quality classified as LOW.

Deir-al-Balah

- Dietary Diversity in children 6–23m: **The reliability score was established at 69%**, with a VERY HIGH representation and timeliness, and a MEDIUM quality.
- Dietary diversity in PBW: **The reliability score was established at 66%**, with a HIGH representation, a VERY HIGH timeliness, and a MEDIUM quality.
- Morbidity in preceding 2 weeks: **The reliability score was established at 56%**, with a representation qualified as LOW, a timeliness as VERY HIGH and a quality as HIGH.
- Clean water access: **The reliability score has been established at 50%**. The sample of households on water access was considered as LOW representation, and the timeliness established as VERY HIGH with quality classified as LOW.

Khan Younis

- Dietary Diversity in children 6–23m: **The reliability score was established at 56%**, with a MEDIUM representation, a VERY HIGH timeliness, and a MEDIUM quality.
- Dietary diversity in PBW: **The reliability score was established at 56%**, with a MEDIUM representation, a VERY HIGH timeliness, and a MEDIUM quality.

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