IPC
Integrated Food Security Phase Classification
*Evidence and Standards for Better Food Security and Nutrition Decisions*

YEMEN

PARTIAL ACUTE MALNUTRITION ANALYSIS FOR 133 DISTRICTS IN 19 ZONES OF YEMEN

IPC ACUTE MALNUTRITION ANALYSIS
JANUARY - DECEMBER 2020

Issued October 2020

KEY FIGURES	JANUARY - DECEMBER 2020

587,573

Number of cases of children aged 0-59 months acutely malnourished

IN NEED OF TREATMENT

Number of Severe Acute Malnutrition (SAM) cases	**98,106**
Number of Moderate Acute Malnutrition (MAM) cases	**489,467**

243,945
Cases of pregnant and lactating women acutely malnourished
IN NEED OF TREATMENT

Projected Situation August - December 2020
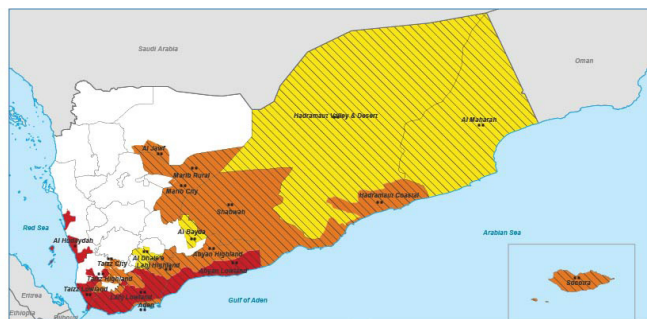
Key for the Map
IPC Acute Malnutrition Classification

|	
1 - Acceptable	5 - Extremely critical
2 - Alert	Phase classification based on MUAC
3 - Serious	Areas with inadequate evidence
4 - Critical	Areas not analysed

Overview

How Severe, How Many and When: Over half a million cases of children aged 0 to 59 months, and more than a quarter of a million cases of pregnant and lactating women, are expected to suffer from acute malnutrition during the course of 2020. Out of the 19 zones included in the IPC Acute Malnutrition (IPC AMN) analysis, two zones are classified in Critical (IPC AMN Phase 4), eight in Serious (IPC AMN Phase 3) and the remaining zones in Alert (IPC AMN Phase 2) during the current period of January July 2020. The situation is expected to deteriorate further during the projection period of August – December 2020. A total of seven zones will likely move into a higher Phase, with 15 of the 19 zones in IPC AMN Phase 3 or IPC AMN Phase 4.

Where: In the current analysis period, Taizz Lowland and Hodeidah Lowland zones are classified in Critical (IPC AMN Phase 4). Abyan highland, Abyan Lowland, Aden, Marib City, Lahj Highland, Lahj Lowland, Taizz City and Taizz Highland zones are classified in Serious (IPC AMN Phase 3). The remaining zones: Al- Bahydha, Al-Dhalea, Al-Jawf, Marib Rural, Al-Maharah, Socotra, Hadramawt Coastal, Hadramawt valleys and desert, and Shabwah are classified in Alert (IPC AMN Phase 2). In the projection period (August – December 2020) the acute malnutrition situation is expected to deteriorate further from Alert (IPC AMN Phase 2) to Serious (IPC AMN Phase 3) in the Al-Jawf, Marib Rural, Socotra, Hadramawt Coastal, and Shabwah zones. Meanwhile, the Abyan Lowland and Lahj lowland zones are expected to move from Serious (IPC AMN Phase 3) to Critical (IPC AMN Phase 4). The situation will likely remain at Serious or Critical levels in the following zones: Abyan Highland, Aden, Marib City, Lahj Highland, Taizz City, Taizz Highland, Taizz Lowland, and Hodeidah Lowland.

Why: The major contributing factors to the acute malnutrition situation include: poor quality of foods consumed by children with <50% meeting minimum dietary diversity requirements, acute food insecurity (about 40% of households are facing high levels of acute food insecurity (IPC Phase 3) or worse), high prevalence of communicable diseases (according to the available data at least a quarter of all children are suffering from diarrhoea, malaria and Acute Respiratory Infections), and poor infant and young child feeding practices (less than 25% in many zones), which is all compounded by poor sanitation. Additionally, poor access to nutrition and health services, and poor immunization (measles and polio) coverage (around 60% in most zones) are also of concern.   During the current analysis period (January - July 2020) – service access and utilization was affected by a number of factors including: floods, conflict, Ramadan and Eid, the impact of COVID-19 travel restrictions, fear of beneficiaries to visit health facilities, and the suspension of some mobile and outreach services.

YEMEN | IPC ACUTE MALNUTRITION ANALYSIS

ACUTE MALNUTRITION MAPS AND POPULATION TABLE

Current Acute Malnutrition January - July 2020
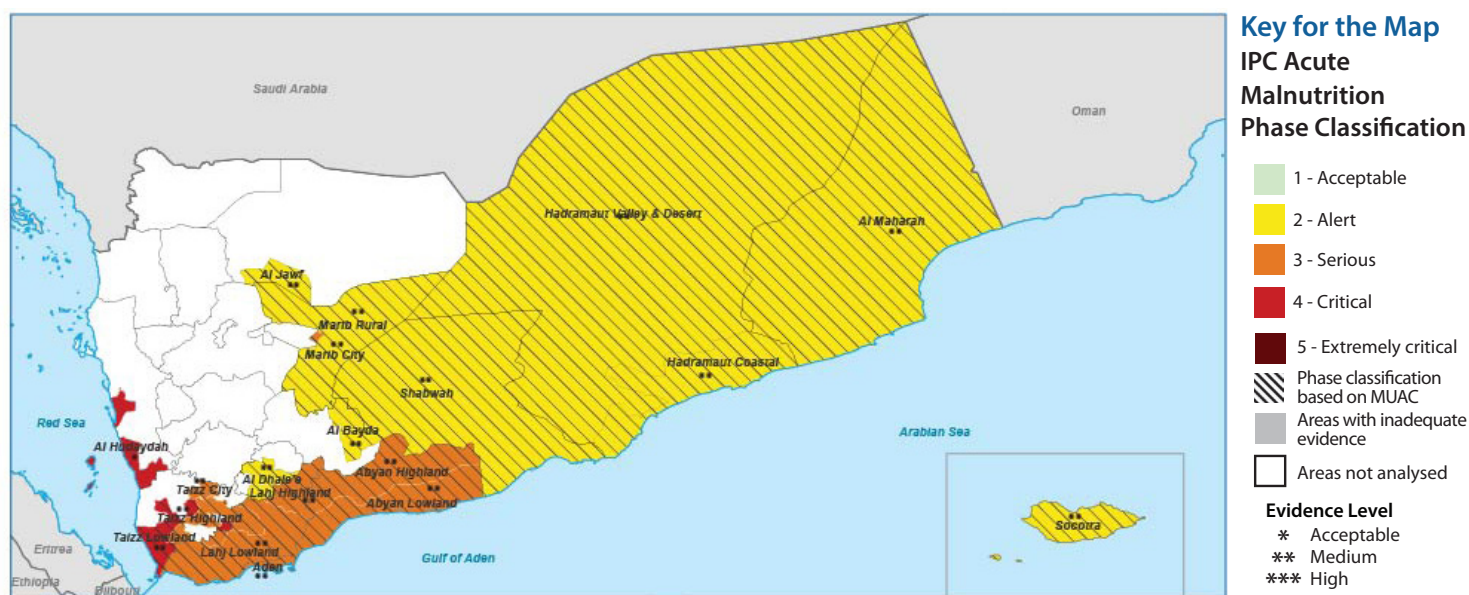
Taizz Lowland and Hodeidah Lowland zones are classified in Critical (IPC AMN Phase 4). Abyan highland, Abyan lowland, Aden, Marib City, Lahj Highland, Lahj Lowland, Taizz City and Taizz Highland zones are classified in Serious (IPC AMN Phase 3). The remaining zones, Al-Bahydha, Al-Dhalea, Al-Jawf, Marib Rural, Al-Maharah, Socotra, Hadramawt Coastal, Hardamawt Valleys and Desert and Shabwah are classified in Alert (IPC AMN Phase 2).

Projected Acute Malnutrition August - December 2020
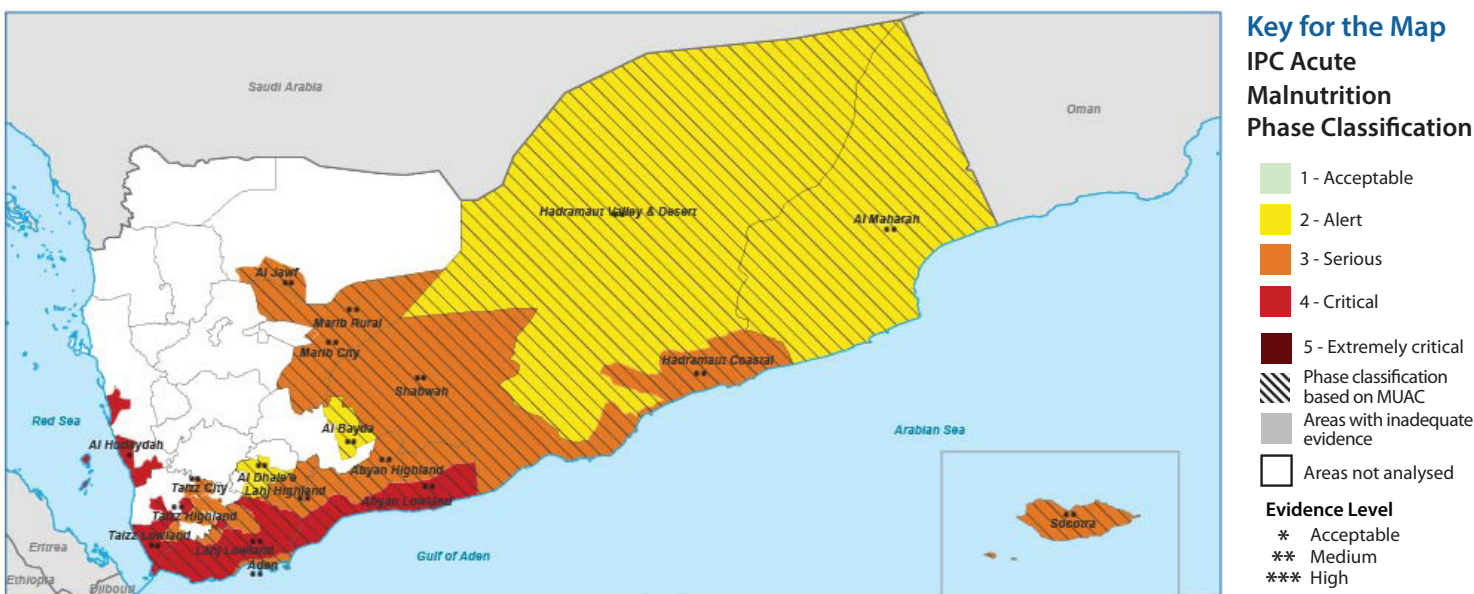
According to the IPC AMN classification during the projection period of August to December 2020, four zones – Lahj Lowland, Taizz Lowland, Abyan Lowland and Hodeidah Lowland – are expected to be in Critical (IPC AMN Phase 4). 11 zones – Abyan Highland, Aden, Al-Jawf, Marib City, Marib Rural, Socotra, Hadramawt Coastal, Lahj Highland, Shabwah, Taizz City and Taizz Highland zones – are classified in Serious (IPC AMN Phase 3). The remaining four zones, Al-Baydha, Al-Dhalea, Al-Maharah and Hadramawt valley and desert, will be in Alert (IPC AMN Phase 2).

Acute Malnutrition January - December 2020

Zone	GAM (%)	No. of Children <5	Number of cases of children aged 0-59 months that need treatment for acute malnutrition		
			GAM Treatment	MAM Treatment	SAM Treatment
Abyan Highland	13.8	65,631	25,491	21,058	4,433
Abyan Lowland	23.1	42,821	28,378	22,602	5,775
Aden	16.7	175,825	82,642	69,280	13,361
Al-Bahydha	10.4	90,559	43,584	38,487	5,098
Al-Dhalea	17.1	12,798	4,714	4,002	712
Hodeidah Lowland	27.1	29,852	5,545	4,789	756
Al-Jawf	12.5	17,942	5,252	4,191	1,060
Al-Maharah	6.6	33,564	25,600	19,743	5,857
Hadramawt Coastal	13.3	106,169	41,625	34,634	6,991
Hadramawt Valleys & Desert	9.5	160,202	42,834	35,620	7,214
Lahj Highland	12.5	116,905	41,129	34,877	6,252
Lahj Lowland	21.0	69,659	41,843	34,364	7,479
Marib City	11.6	20,578	7,103	5,259	1,843
Marib Rural	8.4	54,549	13,769	10,001	3,768
Shabwah	8.8	117,395	31,151	25,385	5,767
Socotra	12.4	12,032	4,360	3,717	643
Taizz City	17.0	86,170	42,068	35,014	7,054
Taizz Highland	17.6	144,910	72,006	62,122	9,884
Taizz Lowland	22.3	55,569	28,479	24,320	4,159
Total	N/A	1,413,130	587,573	489,467	98,106

The table presents an analysis by zone of the total number of children under the age of five, combined prevalence of Global Acute Malnutrition (GAM), as well as the expected number of cases of Severe Acute Malnutrition (SAM), Moderate Acute Malnutrition (MAM), and Global Acute Malnutrition during the course of 2020.

More than half a million acute malnutrition cases requiring urgent treatment are expected in 2020. The three zones with the highest numbers of acute malnutrition cases are: Taizz Highland, Aden, and Lahj Lowland. In terms of severity based on the prevalence of global acute malnutrition, Hodeidah Lowland, Abyan Lowland, Taizz Lowland are the worst affected zones.

SITUATION OVERVIEW AND TREND ANALYSIS

Situation overview

According to the IPC AMN current classification, of the 19 zones included in the analysis, nine zones are in Alert (IPC AMN Phase 2), eight are in Serious (IPC AMN Phase 3), and two are in Critical (IPC AMN Phase 4) during January – July 2020. The two zones with Critical levels of acute malnutrition are Taizz Lowland and Hodeidah Lowland. The eight zones with Serious levels of acute malnutrition fall under five Governorates, namely: Abyan Highland, Abyan Lowland, Aden, Mareb City, Lahj Highland, Lahj Lowland, Taizz City, and Taizz Highland. It should be noted that there may be districts within a particular zone with higher acute malnutrition than the zonal average, but the quality of the latest available data on acute malnutrition outcomes at the zonal level is deemed inadequate to identify these districts. However, using historical data (where available), a list of districts which may be in Serious (IPC AMN Phase 3) or worse are presented in the annex below.

The projection period of August - December 2020 is characterised by a significant deterioration in the acute malnutrition situation. A total of four zones are expected to be in Alert (IPC AMN Phase 2), 11 zones in Serious (IPC AMN Phase 3) and four zones in Critical (IPC AMN Phase 4). A total of 15 zones will likely be in IPC AMN Phase 3 or worse in the projection period, compared to 10 in the current period.

A total of seven zones (49 districts) are likely to move to a worse Phase during the projection period. Five zones, namely: Al-Jawf, Hadramawt Costal, Marib Rural and Shabwah and Soqatra will move from Alert (IPC AMN Phase 2) to Serious IPC AMN Phase 3), while Abyan Lowland and Lahj Lowland will move from Serious (IPC AMN Phase 3) to Critical (IPC AMN Phase 4). Although an increase in severity is expected only in seven of the 19 zones (38.5% population) under review, a deterioration in the overall acute malnutrition situation is expected across all zones, even if this does not mean a change in IPC AMN Phase classification.

Zone	Current situation, January – July 2020 (IPC AMN Phase)	Projected situation, Aug – Dec 2020 (IPC AMN Phase)
Abyan Highland	Phase 3	Phase 3
Abyan Lowland	Phase 3	Phase 4
Aden	Phase 3	Phase 3
Hodeidah Lowland	Phase 4	Phase 4
Al-Bayda	Phase 2	Phase 2
Al-Dhalea	Phase 2	Phase 2
Al-Jawf	Phase 2	Phase 3
Al-Maharah	Phase 2	Phase 2
Hadramawt Coastal	Phase 2	Phase 3
Hadramawt Valleys & Desert	Phase 2	Phase 2
Lahj Highland	Phase 3	Phase 3
Lahj Lowland	Phase 3	Phase 4
Marib City	Phase 3	Phase 3
Marib Rural	Phase 2	Phase 3
Shabwah	Phase 2	Phase 3
Socotra	Phase 2	Phase 3
Taizz City	Phase 3	Phase 3
Taizz Highland	Phase 3	Phase 3
Taizz Lowland	Phase 4	Phase 4

The acute malnutrition situation is likely to worsen in the projection period, particularly due to the presence of threats and shocks affecting the already exhausted population, along with the fragile healthcare and food systems. This includes; the country's protracted conflict and insecurity situation, the overwhelming effects of the COVID-19 pandemic on commercial exchanges, the local economy, remittances and health services, and natural disasters such as floods.

- **Conflict and insecurity:** Over 1.3 million people in the 19 zones have been displaced by conflict. Escalating fighting in Abyan Lowland and Lahj Lowland, Taizz Lowland, Hodeidah Lowland, Al-Jawf and Al-Maharah zones will continue disrupting livelihood and income generating activities by damaging markets and transport infrastructure, affecting farmlands and killing livestock. The conflict has had a detrimental effect not only on livelihoods, but also on food production for local consumption. The aggravation of the security situation will also affect health service delivery, either directly or indirectly, leading to an increase in acute malnutrition levels.

- **Macro and micro level economic drivers:** Commercial exchanges, local economy, currency depreciation (losing 19% value against the USD between January and June 2020), a reduction in remittances (of about 20-70%), commodity price volatility due to inflation (increase of >20% in minimum food basket towards the end of 2019 to mid-2020), import restrictions resulting in significant supply stockout, and a widespread destitution and deterioration of traditional livelihoods have negative impacts on all aspects of life across all zones. Additionally, unpaid salaries to government staff will further aggravate the economic impact on populations. The situation has been compounded further by the overwhelming effects of the COVID-19 pandemic and mitigation measures. All the above will eventually lead to malnutrition due to poor food consumption and/or diseases.

- **Health and health environment:** Weak health systems and poor water, sanitation and hygiene (WASH) services, which are already overstretched, are a major concern in all zones, especially in a context where healthcare services, including nutrition programs, are already unable to ensure optimal coverage. Only about 60% of facilities are functioning as of the end 2019. This figure is expected to be worse in 2020 due to COVID-19. The public health situation shows increased vulnerabilities during the projection period, presenting a higher prevalence of diarrhoea (compared to the previous periods), respiratory infectious diseases (pneumonia), malaria, dengue fever and diphtheria, all of which are associated with childhood wasting. Moreover, key child health interventions, such as immunizations, are likely to remain at the same level (about 60%), if not worsen, in some zones, including: Abyan Lowland, Abyan Highland, Al-Jawf and Shabwah. The deterioration of the food security situation (with 2 million people being food insecure in the early part of 2020 to 3.2 million people being food insecure in the latter part of the year), is mainly driven by inadequate levels of household food consumption, and access to and availability of food. This is expected to remain a major contributing factor in the projection period affecting all zones, which will lead to an overall worsening of the nutritional status of the population across all zones.

- **Childcaring and feeding practices:** The current levels of Infant Feeding Practices, including dietary diversity and quality of food consumption among children, are of major concern with less than 50% receiving minimum dietary diversity requirements.- a situation that will likely deteriorate further given the context described above. Additionally, the poor coverage of blanket supplementary feeding programmes (<50% in nine zones), as well as CMAM services, are expected to further deteriorate during the projection period due to programming adaptation in response to COVID-19 containment measures and funding limitations.

- **Natural disasters:** Cyclones, floods and Desert Locusts will likely affect the anticipated harvest (both agriculture and fishing) in some governorates (Abyan, Socotra, Shabwah, Lahj, Al-Baydha, and Hadhramawt). Floods will also affect the already weak WASH infrastructure. Additionally, movement restrictions related to conflict and COVID-19 measures will have negative impacts on agricultural and fishing production and, subsequently, on the nutritional status of the most vulnerable groups.

Trend analysis

Comparable data on acute malnutrition is limited in many zones. However, available information suggests the acute malnutrition situation has deteriorated over the past years in several zones. Given the projected trends in the contributing factors and other contextual information, the situation is likely to further deteriorate.

In the Lowland of Abyan and Lahj zones the acute malnutrition situation is projected to deteriorate significantly from the current IPC AMN classification of Serious (IPC AMN Phase 3) to Critical (IPC AMN Phase 4) during the period of August -December 2020. According to the available data, in the Lowlands of Abyan, the nutrition situation has deteriorated from 16.3% of GAM in 2017 to 20.8% GAM in 2019. The GAM prevalence in Lahj Lowland has persistently remained at Critical levels in the recent past: 25.3% in 2017, 22.2% in 2018, and 19.8% in 2019.

The acute malnutrition situation in the Lowlands of Taizz and Hodeidah, which are both currently classified as Critical (IPC AMN Phase 4), is expected to remain the same during the projected period, although the overall situation could deteriorate within the Phase. Historical data shows the GAM prevalence has consistently remained in Critical (IPC AMN Phase 4) in Taizz Lowland over the past years: 25.1% in 2017 and 22.6% in 2018. Although the actual prevalence has slightly varied between districts within the zone: Maqbanah and Al-Mukha districts with the prevalence of 21.8%, and Dhubab Mawza Al Wazip'iyah with 17.8% of GAM and classified in Serious (IPC AMN Phase 3). One prevalence estimate available for Hodeidah Lowland indicates it was in Critical (IPC AMN Phase 4) in 2017 with a GAM prevalence of 25.2%.

The acute malnutrition situation in the zones of Al-Jawf, Marib (Marib Rural), Socotra, Hadramawt (Hadramawt Coastal) and Shabwah, has fluctuated between Alert (IPC AMN Phase 2) and Serious (IPC AMN Phase 3) in the past. Based on the latest data available they are now classified in Alert (IPC AMN Phase 2). However, according to the IPC AMN analysis, these areas will move to Serious (IPC AMN Phase 3) in the projection period as a result of changes in the contributing and contextual factors.

• According to historical survey data on GAM for Al Jawf, the acute malnutrition situation slightly improved from Serious (IPC AMN Phase 3) in 2017 (GAM: 11.2%) to Alert (IPC AMN Phase 2) in 2018 (GAM: 9.2%).

• Acute malnutrition in Marib Rural has also fluctuated between Alert (IPC AMN Phase 2) and Serious (IPC AMN Phase 3) with the GAM prevalence of 8.1% in 2017, 10.0% in 2018, and 6.8% in 2019.

• The GAM prevalence available for the two districts of Socotra (Hidaybu and Qulensya Wa Abd Al Kuri) shows Serious (IPC AMN Phase 3) levels of acute malnutrition in 2017 with a GAM of 13.0% and 11.6% in2019.

• In 2017, Hadramawt was in Critical (IPC AMN Phase 4) with the GAM prevalence of 20.3%. However, according to a survey in 2019, the coastal districts of the Governorate moved to Serious (IPC AMN Phase 3) with the GAM prevalence of 12.5%.

• Shabwah Governorate (Plateau and Lowlands has consistently remained in Alert (IPC AMN Phase 2) over the past several years with the GAM prevalence of 6.2% and 8.5% respectively in 2017; and 5.9% in 2019).

Risk factors to monitor

Given that the acute malnutrition situation is likely to deteriorate further in a majority of the zones, and that it is not possible to carry out household based surveys in the aftermath of the COVID-19 pandemic, it is imperative that the following risk factors are monitored and the IPC AMN projections are updated as risk factors change:

• **Conflict:** particularly in areas that are directly affected by fighting (e.g. Mareb, Al-Jawf, Al Baydha, Al Dhalea, Taizz and Al Hodeidah) but also in other areas that are indirectly affected.

• **Impact of COVID-19 on the economy:** movement restrictions and/or lockdown measures to curtail the spread of the virus have caused an increase in food prices, a reduction of food imports, lower remittances, inflation, and food insecurity at the household level.

• **Natural disasters:** floods, cyclones and Desert Locust infestations in areas that are vulnerable to these hazards.

• **Morbidity patterns:** especially cholera and other seasonal diseases such as malaria and Acute Respiratory Infections.

• **Health and nutrition service availability, access and utilization:** the impact of COVID-19 on an already fragile health system, including: an increase in the number of COVID-19 cases, the availability of healthcare staff and equipment, changed behaviours of people seeking healthcare, and reduced household economic resources.

• **Vaccination trends:** both as a result of the weak health infrastructure and as the result of the COVID-19 pandemic.

• Humanitarian food assistance funding levels.

RECOMMENDATIONS FOR ACTION

This section outlines the broad recommendations across the zones/governorate for both the immediate/short-term and medium-to-longer-term timeframe based on the situation analysis. Specific response actions will then need to be outlined for each governorate/ zone through a response analysis. This process should be led by the Nutrition Cluster with the MOPHP in collaboration with other relevant sectors.

Immediate/short term recommendations and objectives in host and IDP communities

Nutrition specific

- Implement blanket supplementary programs targeting vulnerable groups (children under 2, pregnant and lactating women) for prevention of malnutrition based on solid needs assessment and identified gaps in priority locations.
- Ensure treatment: strengthen Community-based Management of Acute Malnutrition (CMAM) program - ensuring coverage of treatment of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM). Expansion of appropriate treatment services should be based on solid needs assessment and identified gaps; and ensuring service utilization by strengthening a) community and facility based screening for acute malnutrition and referrals to facilities for treatment and b) referrals from Out-patient Therapeutic Programme (OTP) to Therapeutic Feeding Centre (TFC) (support transport and caregiver costs).
- Ensure additional nutrition specific interventions.
- Strengthen Micronutrient Powder supplementation and Vitamin A supplementation programming.
- Strengthen health promotion activities, which should aim to increase healthcare seeking behaviour for children under 5 years old and population trust in health and nutrition services, particularly in light of the COVID-19 pandemic.
- Strengthen IYCF messaging and counselling at Health Facilities and at the community level.
- Support the Social Behavioural Change for Communication (SBCC) to improve home diets, infant and young child feeding as well as proper use of nutrition products.
- Strengthen nutrition program monitoring.
- Strengthen nutrition information systems and community screening programmes (surveillance system and surveys and system for routine screening) by ensuring that the system is adapted to the response; that the monitoring provides timely information for decision making and actions, and is based on quality assured data and analysis and it addresses challenges of information gathering in the context of COVID-19.
- Strengthen and maintain coordination and relationships between nutrition partners and the Ministry of Public Health and Population (MoPHP) in order to improve the nutrition services.

Nutrition Sensitive (Prevention)

- Ensure continued provision of quality primary health care including vaccination services.
- Scale up efforts for community awareness building and engagement with relevant authority to mitigate the likely impact on food security and nutrition status,
- Strengthen WASH interventions including: water chlorination, distribution of chlorine tablets for water chlorination and hand washing, WASH in health facilities including nutrition program sites, update WASH assessments in health facilities.
- Support cash programming to enhance the resilience of affected families to cope with food insecurity and access to health and nutrition services.
- Support the local authorities to develop preparedness and response plans for health outbreaks and seasonal increases of malnutrition.

Medium to long term recommendations and objectives in host and IDP communities

Nutrition Sensitive (Prevention)

- Support infrastructure development to reduce the impact of flooding and its likely impact on food dimensions and nutrition status, particularly in lowland and flood-prone areas in districts of the following zones: Shabwah, Lahj Lowland, Hadramawt coast, Hadramawt, Valley , Al-Dhalea and Al-Bahydha.
- Support integrated livelihood and nutrition programming for improved nutrition status and food security by supporting locally feasible livelihood projects including support for fisheries in coastal areas, supporting small businesses, promoting kitchen gardening at household and community levels and supporting cash programming.

TOTAL NUMBER OF CASES OF 0-59 MONTHS AND PREGNANT AND LACTATING WOMEN AFFECTED BY ACUTE MALNUTRITION AND IN NEED OF TREATMENT

The expected number of cases of acute malnutrition among children was calculated using the following formula: npk, where n is the number of children under the age of five, p is the prevalence of acute malnutrition, and k is the incident correction factor of 2.6. Given that the prevalence of GAM based on MUAC, which was used as the primary data in the IPC AMN analysis, would underestimate the magnitude of the problem, latest available information on the combined GAM, MAM, and SAM estimates was used in calculation of the total burden of acute malnutrition. The malnutrition burden was calculated for the whole year (January- December 2020) using this procedure: - 1) the current period (January - July 2020) was divided into two: (a) January – March (period considered to have no impact on COVID-19); the point prevalence of combined GAM, MAM and SAM were used for all zones. (b) April to July – during this period the impacts of COVID-19 were present and the analysis team estimated an increased malnutrition burden by 22% (11% MAM and 11% SAM). 2) During the projected period (August – December 2020), for the zones projected to deteriorate and to move to a higher IPC AMN Phase, the Upper Confidence Level (UCL) of the combined GAM, MAM, and SAM estimates were used for the five months period, while those expected to remain at the same IPC AMN phase, the April-July formulae were maintained.

Zone	Children under 5						Pregnant and lactating women		
	Total #	Combined GAM (%)	Combined MAM (%)	Combined SAM (%)	Estimated no. of GAM cases	Estimated no. of MAM cases	Estimated no. of SAM cases	Total #	% Acute Malnutrition	# of cases acute malnutrition
Abyan Highland	65,631	13.8	11.4	2.4	25,491	21,058	4,433	29,781	15.0	8,934
Abyan Lowland	42,821	23.1	18.9	4.2	28,378	22,602	5,775	19,431	15.0	5,829
Aden	175,825	16.7	14.0	2.7	82,642	69,280	13,361	79,785	14.0	22,340
Al Bayda	90,559	10.4	8.3	2.1	43,584	38,487	5,098	41,093	19.4	14,136
Al-Dhalea	12,798	17.1	15.1	2.0	4,714	4,002	712	5,807	17.2	1,812
Hodeidah Lowland	29,852	27.1	20.9	6.2	5,545	4,789	756	13,546	31.2	2,953
Al-Jawf	17,942	12.5	11.0	1.5	5,252	4,191	1,060	8,141	15.6	3,159
Al-Maharah	33,564	6.6	5.7	0.9	25,600	19,743	5,857	15,230	10.9	9,504
Hadramawt Coastal	106,169	13.3	11.5	1.8	41,625	34,634	6,991	48,177	13.0	12,526
Hadramawt Valleys & Desert	160,202	9.5	7.9	1.6	42,834	35,620	7,214	72,695	13.0	18,901
Lahj Highland	116,905	12.5	10.6	1.9	41,129	34,877	6,252	53,048	26.2	27,797
Lahj Lowland	69,659	21.0	17.7	3.3	41,843	34,364	7,479	31,609	26.2	16,563
Marib City	20,578	11.6	9.0	2.6	7,103	5,259	1,843	9,338	11.6	2,166
Marib Rural	54,549	8.4	6.4	2.0	13,769	10,001	3,768	24,753	11.6	5,743
Shabwah	117,395	8.8	7.5	1.3	31,151	25,385	5,767	53,270	20.4	21,734
Socotra	12,032	12.4	10.9	1.5	4,360	3,717	643	5,460	25.0	2,730
Taizz City	86,170	17.0	13.4	3.6	42,068	35,014	7,054	39,102	25.8	20,176
Taizz Highland	144,910	17.6	15.2	2.4	72,006	62,122	9,884	65,756	25.8	33,930
Taizz Lowland	55,569	22.3	17.9	4.4	28,479	24,320	4,159	25,216	25.8	13,011
Total	1,413,130	N/A	N/A	N/A	587,573	489,467	98,106	641,239	N/A	243,945

COMPARATIVE ANALYSIS

Zone	Current Situation, January – July 2020 (IPC AMN Phase)	Current Situation, Feb – Apr 2020 (IPC AFI Phase)	Projected Situation, Aug – Dec 2020 (IPC AMN Phase)	Projected Situation, July – Dec 2020 (IPC AFI Phase)
Abyan Highland	Phase 3	Phase 3	Phase 3	Phase 3
Abyan Lowland	Phase 3	Phase 3	Phase 4	Phase 3
Aden	Phase 3	Phase 3	Phase 3	Phase 3
Hodeidah Lowland	Phase 4	Phase 3	Phase 4	Phase 3
Al-Bayda	Phase 2	Phase 3	Phase 2	Phase 3
Al-Dhalea	Phase 2	Phase 3	Phase 2	Phase 3
Al-Jawf	Phase 2	Phase 2	Phase 3	Phase 3
Al-Maharah	Phase 2	Phase 2	Phase 2	Phase 2
Hadramawt Coastal	Phase 2	Phase 2	Phase 3	Phase 3
Hadramawt Valleys & Desert	Phase 2	Phase 3	Phase 2	Phase 2
Lahj Highland	Phase 3	Phase 3	Phase 3	Phase 3
Lahj Lowland	Phase 3	Phase 3	Phase 4	Phase 3
Marib City	Phase 3	Phase 3	Phase 3	Phase 3
Marib Rural	Phase 2	Phase 3	Phase 3	Phase 3
Shabwah	Phase 2	Phase 3	Phase 3	Phase 3
Socotra	Phase 2	Phase 3	Phase 3	Phase 3
Taizz City	Phase 3	Phase 2	Phase 3	Phase 3
Taizz Highland	Phase 3	Phase 3	Phase 3	Phase 3
Taizz Lowland	Phase 4	Phase 3	Phase 4	Phase 3

Strong convergence and similarity was observed between the AFI and AMN Phase current period classification in 10 out of the 19 zones. During the projected period, Hodeidah Lowland, Lahj Lowland, Taizz Lowland and Abyan Lowland zones were classified with Critical levels of acute malnutrition (IPC AMN Phase 4), which is higher than the AFI classification of Crisis (IPC Phase 3) for the same zones. In addition, Taizz Lowland and Hodeidah Lowland areas are experiencing significant levels of access constraints because of active conflicts and security challenges, with reduced health system functionality. Unlike IPC AMN, where seven zones are expected to move to a higher Phase during the projection period, only two zones are expected to move to a higher AFI Phase.

IPC AFI current classification: February – Apr 2020
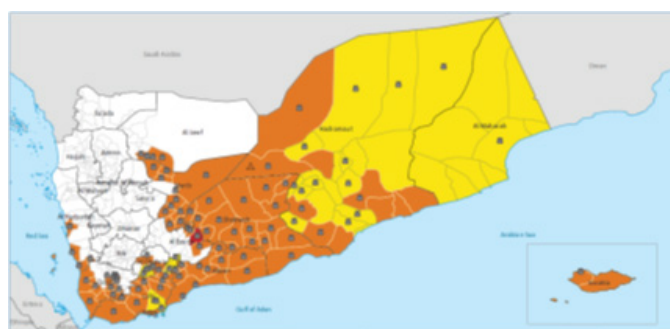
IPC AFI projected classification: July – December 2020
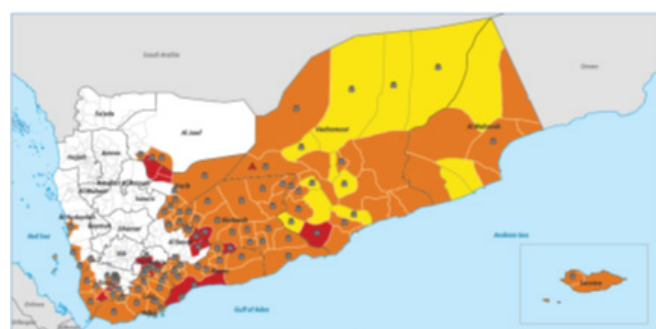
Key for the Map
IPC Acute Food Insecurity Phase Classification

1 - Minimal
2 - Stressed
3 - Crisis
4 - Emergency
5 - Famine
Areas with inadequate evidence
Areas not analysed

SNAPSHOT

CURRENT ACUTE MALNUTRITION JANUARY - JULY 2020
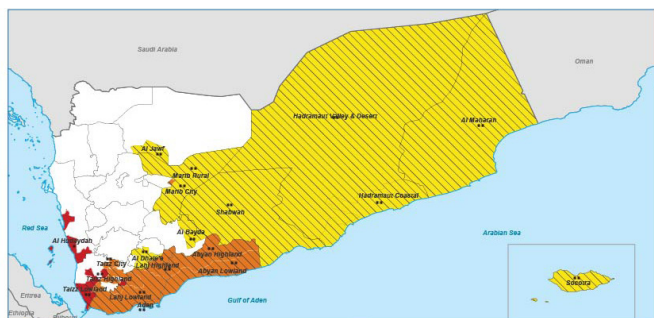
PROJECTED ACUTE MALNUTRITION AUG - DEC 2020
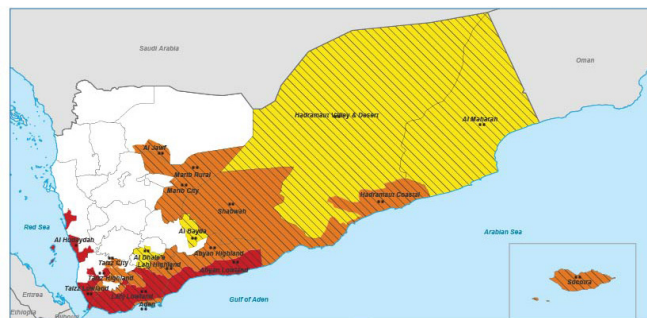
0 Zones Extremely Critical
2 Zones Critical
8 Zones Serious
9 Zones Alert
0 Zones Acceptable

PREVALENCE OF ACUTE MALNUTRITION

	Abyan Highland	Abyan Lowland	Aden	Al Bayda	Al-Dhalea	Hodeidah Lowland	Al-Jawf	Al-Maharah	Hadramawt Coastal
SAM	2.4	4.2	2.7	2.1	2	6.2	1.5	0.9	1.8
MAM	11.4	18.9	14	8.3	15.1	20.9	11	5.7	11.5
GAM	13.8	23.1	16.7	10.4	17.1	27.1	12.5	6.6	13.3

KEY DRIVERS

- Inadequate dietary intake
- Insufficient health services
- Diseases
- Inadequate care for children
- High food insecurity
- Unusual shocks

	Hadramawt Valleys & Desert	Lahj Highland	Lahj Lowland	Marib City	Marib Rural	Shabwah	Socotra	Taizz City	Taizz Highland	Taizz Lowland
SAM	1.6	1.9	3.3	2.6	2	1.3	1.5	3.6	2.4	4.4
MAM	7.9	10.6	17.7	9	6.4	7.5	10.9	13.4	15.2	17.9
GAM	9.5	12.5	21	11.6	8.4	8.8	12.4	17	17.6	22.3

DECEMBER 2019 - DECEMBER 2020

587,573

number of cases of children aged 0-59 months acutely malnourished

IN NEED OF URGENT ACTION

Number of Severe Acute Malnutrition (SAM) cases	**98,106**
Number of Moderate Acute Malnutrition (MAM) cases	**489,467**

1,413,130

Total number of children 0 -59 months

PROJECTION AUGUST - DECEMBER 2020

Of the 19 zones | Acute malnutrition is expected to

Deteriorate	7 Zones
Remain Stable	12 Zones
Improve	0 Zones

FACTORS CONTRIBUTING TO ACUTE MALNUTRITION (Zones 1-9)

CONTRIBUTING FACTORS			Abyan Highland	Abyan Lowland	Aden	Al-Bayda	Al-Dhalea	Hodeidah Lowland	Al-Jawf	Al-Maharah	Hadramawt Coastal
Inadequate dietary intake		Minimum Dietary Diversity (MDD)	Major	Major	Minor	Major	Major	Major	Major	Minor	Minor
		Minimum Meal Frequency (MMF)	Major	Major	Major	Minor	Major	Major	Minor	Minor	Minor
		Minimum Acceptable Diet (MAD)	Major	Major	Major	Major	Major	Major	Major	Minor	Minor
		Minimum Dietary Diversity – Women (MDD-W)	No data	No data	No data	No data	No data	No data	No data	No data	No data
Diseases		Diarrhoea	Minor	Major	Minor	Major	Major	Minor	Major	Major	Major
		Dysentery	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Malaria	Minor	Major	Major	Major	Major	Major	Major	Minor	Major
		HIV/AIDS prevalence	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Acute Respiratory Infection	Minor	Major	Major	Major	Major	Major	Major	Minor	Major
		Disease outbreak	No data	No data	No data	No data	No data	Minor	No data	No data	No data
Inadequate access to food		Outcome of the IPC for Acute Food Insecurity analysis	Major	Major	Major	Major	Major	Major	Major	Minor	Minor
Inadequate care for children		Exclusive breastfeeding under 6 months	Major	Major	Major	Major	Major	Major	Major	Minor	Major
		Continued breastfeeding at 1 year	Major	Major	Minor	Major	Minor	Major	Major	Minor	Minor
		Continued breastfeeding at 2 years	Major	Major	Minor	Major	Major	Minor	No data	Minor	Minor
		Introduction of solid, semi-solid or soft foods	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Early Initiation of breastfeeding	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Predominant breastfeeding	No data	No data	No data	No data	No data	No data	No data	No data	No data
Insufficient health services & unhealthy environment		Measles vaccination	Major	Major	Minor	Minor	Minor	No data	Major	No Contributing	Minor
		Polio vaccination	Minor	Minor	Minor	Minor	Minor	Minor	Major	No Contributing	Minor
		Vitamin A supplementation	Minor	Minor	Minor	Minor	Minor	Minor	Major	No data	Minor
		Skilled birth attendance	No data	No data	No data	No data	No data	No data	No data	No data	No data

Legend: Major Contributing Factor — Minor Contributing Factor — No Contributing Factor — No data

FACTORS CONTRIBUTING TO ACUTE MALNUTRITION (Zones 1-9 cont.)

CONTRIBUTING FACTORS			Abyan Highland	Abyan Lowland	Aden	Al-Bayda	Al-Dhalea	Hodeidah Lowland	Al-Jawf	Al-Maharah	Hadramawt Coastal
Insufficient health services & unhealthy environment		Health seeking behaviour	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)	Major	Major	Major	Major	Major	Minor	Major	No data	Major
		Access to a sufficient quantity of water	No data	No data	Minor	No data	No data	No data	No data	No data	No data
		Access to sanitation facilities	Major	Minor	Minor	Minor	Major	Major	No data	Minor	Minor
		Access to an improved source of drinking water	Major	Minor	Major	Major	Minor	Minor	No data	Major	No data
		Micronutrient powder coverage	Minor	Minor	Minor	Minor	Minor	Minor	Minor	Minor	Minor
		Coverage of all basic vaccine	No data	No data	Minor	No data	No data	No data	No data	No data	No data
		Treatment of drinking water	No data	No data	No data	No data	No data	No data	No data	No data	No data
Other nutrition issues		Anaemia among children 6-59 months	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Anaemia among pregnant women	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Anaemia among non-pregnant women	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Vitamin A deficiency among children 6-59 months	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Low birth weight	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Fertility rate	No data	No data	No data	No data	No data	No data	No data	No data	No Contributing
Basic Causes		Usual/Normal Shocks	No data	No data	Major	Major	Major	No data	Minor	No data	No data
		Recurrent Crises due to Unusual Shocks	Major	Major	Major	Minor	Minor	Major	No data	No data	Major

Legend: Major Contributing Factor · Minor Contributing Factor · No Contributing Factor · No data

FACTORS CONTRIBUTING TO ACUTE MALNUTRITION (Zones 10-19)

CONTRIBUTING FACTORS			Hadramawt Valleys & Desert	Lahj Highland	Lahj Lowland	Marib City	Marib Rural	Shabwah	Socotra	Taizz City	Taizz Highland	Taizz Lowland
Inadequate dietary intake		Minimum Dietary Diversity (MDD)	Minor	Major	Major	Major	Minor	Major	Minor	Minor	Major	Major
		Minimum Meal Frequency (MMF)	Minor	Major	Major	Major	Minor	Major	Minor	Minor	Major	Minor
		Minimum Acceptable Diet (MAD)	Minor	Major	Major	Major	Major	Major	Minor	Major	Major	Major
		Minimum Dietary Diversity – Women (MDD-W)	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Diseases		Diarrhoea	Major	Major	Major	Major	Major	Major	No Contributing	Major	Major	Major
		Dysentery	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Malaria	Major	Major	Major	Major	Major	Major	No Contributing	Major	Major	Major
		HIV/AIDS prevalence	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Acute Respiratory Infection	Major	Major	Major	Major	Major	Major	No Contributing	No Contributing	Major	Major
		Disease outbreak	No data	No data	No data	No data	No data	Major	No data	No data	Major	No data
Inadequate access to food		Outcome of the IPC for Acute Food Insecurity analysis	Minor	Major	Major	Major	Major	Major	Major	Minor	Major	Minor
Inadequate care for children		Exclusive breastfeeding under 6 months	Major	Major	Major	Major	Major	Major	Minor	Minor	Major	Major
		Continued breastfeeding at 1 year	Minor	Major	Major	Minor	Major	Major	Minor	Major	Major	Major
		Continued breastfeeding at 2 years	Minor	Major	Major	Major	Major	Major	Minor	Minor	Minor	Minor
		Introduction of solid, semi-solid or soft foods	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Early Initiation of breastfeeding	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
		Predominant breastfeeding	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Insufficient health services & unhealthy environment		Measles vaccination	No Contributing	Minor	Minor	Minor	No data	Major	No Contributing	No Contributing	Minor	Minor
		Polio vaccination	No Contributing	Minor	Minor	Minor	Minor	Major	No Contributing	No Contributing	No data	No data
		Vitamin A supplementation	No Contributing	No data	Minor	Minor	Minor	Major	No Contributing	No data	Minor	Minor
		Skilled birth attendance	No data	Minor	Minor	No data	No data	No data	No data	No data	No data	No data

Legend — Major Contributing Factor · Minor Contributing Factor · No Contributing Factor · No data

FACTORS CONTRIBUTING TO ACUTE MALNUTRITION (Zones 10-19 cont.)

CONTRIBUTING FACTORS		Hadramawt Valleys & Desert	Lahj Highland	Lahj Lowland	Marib City	Marib Rural	Shabwah	Socotra	Taizz City	Taizz Highland	Taizz Lowland
Insufficient health services & unhealthy environment	Health seeking behaviour	No data	Major	Minor	No data	No data	No data	No data	No data	No data	No data
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)	Major	Major	Major	Major	Major	Major	No data	Major	Major	Minor
	Access to a sufficient quantity of water	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Access to sanitation facilities	Minor	Major	Major	No data	No data	Major	Minor	No Contributing	Minor	Major
	Access to an improved source of drinking water	No data	Major	Major	Minor	Minor	Major	Minor	Major	Minor	Major
	Micronutrient powder coverage	Minor	Minor	Minor	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Coverage of all basic vaccine	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Treatment of drinking water	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Other nutrition issues	Anaemia among children 6-59 months	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Anaemia among pregnant women	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Anaemia among non-pregnant women	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Vitamin A deficiency among children 6-59 months	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Low birth weight	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
	Fertility rate	No Contributing	No Contributing	No Contributing	No data	No data	No data	No Contributing	No data	No data	No data
Basic Causes	Usual/Normal Shocks	No data	Major	Major	Minor	Major	No data	No data	No data	Minor	No data
	Recurrent Crises due to Unusual Shocks	Major	Major	Major	No data	No data	No data	No data	No data	Minor	No data

Legend: Major Contributing Factor · Minor Contributing Factor · No Contributing Factor · No data

PROCESS AND METHODOLOGY

The Yemen IPC TWG brought together available nutrition data and related information in a systematic manner to analyse the acute malnutrition situation across 133 districts in 19 zones in southern Yemen. With the overall management and coordination provided by the FAO program, the Yemen IPC TWG conducted a series of consultative and technical meetings with different stakeholders to plan, prepare, and conduct the IPC AMN analysis.

The primary source of data for this analysis was the Food Security and Livelihood Assessment (FSLA) MUAC data collected in 133 districts between December 2019 and January 2020. The MUAC data was cleaned and prepared for IPC analysis, with technical support and guidance from Action against Hunger (ACF), IPC Global Support Unit, and Centre for Disease Control and Prevention Atlanta due to concerns raised about the quality of the data. In July 2020, following the ACF-GSU-CDC review recommendations, the National SMART Technical Committee endorsed the MUAC data for IPC analysis with the provision that the IPC AMN analysis be conducted at the zonal level giving into consideration that all historical data concerning nutrition and other contributing factors are mainly available at the zonal level (especially those that are collected by SMART surveys during 2018/2019). Additionally, all nutrition programme reports (admission and service coverage) and health program data are also only available at the zonal level.

Due to COVID-19 restrictions, the IPC analysis was conducted virtually, with 61 individuals from government ministry staff, local NGOs, INGOs, UN agencies and Cluster partners participating between 16 - 20 August, 2020.

The IPC Global Support Unit provided overall support and guidance to this virtual analysis while FAO provided the necessary coordination and IT support.

This was the first IPC AMN analysis conducted in Yemen and for many of the analysts it was the first time they participated in such a workshop. A refresher training was carried out by the IPC GSU during day one and part of day two in advance of the analysis. However, it was difficult to cover both the training and the analysis within one week. Some of the analysts provided simultaneous translation during the training, saving some significant time. The analysis was conducted in-line with global guidance and tools, with the technical support of a group of IPC experts under the auspice of the GSU.

Informed by the MUAC results at zone levels, the upper confidence interval of the most recent combined prevalence of acute malnutrition was used to estimate the total burden of acute malnutrition in the zones where the nutrition situation was projected to deteriorate; the point estimate was used to estimate the total burden in other zones that are expected to remain in the same IPC AMN Phase.

Limitations and learning

- Daily quality checks were not feasible during the data collection period to rectify problems. Due to concerns of the quality of the data, MUAC data was used at the zonal level and not at the district level.

- Delays in cleaning and preparation of the primary data resulted in this IPC AMN analysis being conducted much later than the IPC AFI analysis and just within the acceptable time frame as per IPC protocols. Clearer guidance on criteria for cleaning and preparing data to be provided in future IPC AMN analyses.

- Absence of recent SMART survey data is a major challenge. In the absence of recent SMART survey data, MUAC from the FSLA and historical SMART survey data were used in the analysis with medium reliability. Since the MUAC data didn't meet IPC reliability criteria, historical data alone was used in the classification of Hodeidah Lowland with low reliability.

- Given that zonal level projections were extrapolated to district level in estimation of the burden of acute malnutrition among children under 5 years, it might have overestimated/ underestimated the burden in some districts that either had lower or higher than the zonal averages of combined acute malnutrition prevalence respectively. The burden of acute malnutrition might also be underestimated in the districts where an evolving nutrition situation was not sufficient to move the district into a higher IPC AMN phase.

What is the IPC and IPC Acute Malnutrition?

The IPC is a set of tools and procedures to classify the severity and characteristics of acute food insecurity and acute malnutrition crises as well as chronic food insecurity based on international standards. The IPC consists of four mutually reinforcing functions, each with a set of specific protocols (tools and procedures).

The core IPC parameters include consensus building, convergence of evidence, accountability, transparency and comparability. The IPC analysis aims at informing emergency response as well as medium and long-term food security policy and programming.

The IPC Acute Malnutrition Classification provides information on the severity of acute malnutrition, highlights the major contributing factors to acute malnutrition, and provides actionable knowledge by consolidating wide-ranging evidence on acute malnutrition and contributing factors.

Contact for further Information

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- Overall, the virtual experience was successful, however, there were some limitations: weak internet connectivity hindered the continuous participation of some analysts during the workshop; simultaneous translation worked effectively for the training but it did not work so well for the plenary sessions. It is suggested that in future workshops professional translators should be used for this task.

- Secondary data was not available in a central repository. While large volumes of secondary data were shared with the analysts, they were not shared or presented in a user-friendly and streamlined fashion. In future workshops this information should be prepared and presented more clearly.

ANNEX: Districts that are in IPC AMN Phase 3 or above based on historical data

Disclaimer:

Available data on Global Acute Malnutrition (GAM) based on Weight for Height Z-score at the district level is limited or outdated in several zones and therefore does not enable comparative analysis of the situation across all districts. The table below presents a list of districts which are possibly at IPC AMN Phase 3 or above based on the available recent data.

Zone	Districts name	GAM based on WHZ (%)	Combined GAM (%)	No of cases of children based on combined GAM
Abyan Lowland	Ahwar	20.8%	23.1%	3,278
Abyan Lowland	Zingibar	20.8%	23.1%	3,879
Abyan Lowland	khanfir	20.8%	23.1%	15,990
Aden	Dar Sad	15.5%	16.7%	9,967
Aden	Ash Shaikh Outhman	15.5%	16.7%	12,205
Aden	Al Mansura	15.5%	16.7%	11,774
Aden	Al Buraiqeh	15.5%	16.7%	8,976
Aden	Attawahi	15.5%	16.7%	6,300
Aden	Al Mualla	15.5%	16.7%	5,558
Aden	Craiter	15.5%	16.7%	8,925
Aden	Khur Maksar	15.5%	16.7%	5,003
Hodeidah Lowland	Ad Durayhimi	25.2%	27.1%	2,448
Hodeidah Lowland	Hays	25.2%	27.1%	5,377
Hodeidah Lowland	Al Khawkhah	25.2%	27.1%	4,418
Hodeidah Lowland	At Tuhayat	25.2%	27.1%	9,041
Lahj Lowland	Al Milah	19.8%	21.0%	3,473
Lahj Lowland	Al Musaymir	19.8%	21.0%	3,243
Lahj Lowland	Tur Al Bahah	19.8%	21.0%	5,747
Lahj Lowland	Al Madaribah Wa Al Arah	19.8%	21.0%	6,224
Lahj Lowland	Al Hawtah	19.8%	21.0%	3,019
Lahj Lowland	Tuban	19.8%	21.0%	12,522
Taizz City	Al Qahirah	15.4%	17.0%	8,451
Taizz City	Salh	15.4%	17.0%	6,076
Taizz Highland	Jabal Habashy	15.0%	17.6%	11,662
Taizz Highland	Mashra'a Wa Hadnan	15.0%	17.6%	2,526
Taizz Highland	Sabir Al Mawadim	15.0%	17.6%	10,290
Taizz Highland	Al Misrakh	15.0%	17.6%	9,787
Taizz Highland	Dimnat Khadir	15.0%	17.6%	13,150
Taizz Highland	Hayfan	15.0%	17.6%	8,255
Taizz Highland	At Ta'iziyah	15.0%	17.6%	20,448
Taizz Highland	Al Ma'afer	15.0%	17.6%	11,017
Taizz Highland	Al Mawasit	15.0%	17.6%	12,212
Taizz Lowland	Dhubab	17.8%	22.3%	2,436
Taizz Lowland	Mawza	17.8%	22.3%	1,325
Taizz Lowland	Al Wazi'iyah	17.8%	22.3%	886

Combined GAM (%): Percentage of children with Weight for Height (WHZ) <-2, Mid-Upper Arm Circumference (MUAC) <125mm, or presence of bilateral pitting oedema; **GAM based on WHZ (%):** Percentage of children with Weight for Height (WHZ) <-2 and/or presence of bilateral pitting oedema.