PAKISTAN

Over 2 million children in flood-affected areas of Pakistan are suffering acute malnutrition in the aftermath of the 2022 flooding

IPC ACUTE MALNUTRITION ANALYSIS
MARCH 2023 – JANUARY 2024

Published on October 9, 2023

KEY FIGURES	MARCH 2023 - JANUARY 2024	
2.14M cases of children aged 6-59 months acutely malnourished IN NEED OF TREATMENT	Severe Acute Malnutrition (SAM)	598,800
	Moderate Acute Malnutrition (MAM)	1,544,900

Overview

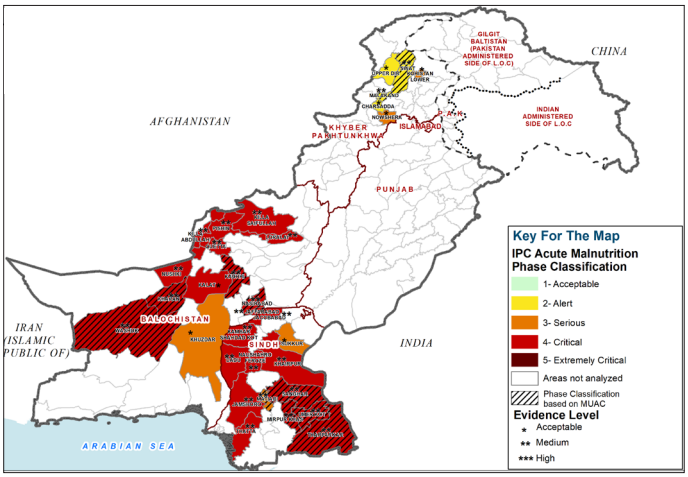
The latest acute malnutrition (AMN) analysis by the Integrated Food Security Phase Classification (IPC) has found that 2.14 million children in parts of Pakistan are suffering acute malnutrition. The analysis conducted in 32 districts of Balochistan, Khyber Pakhtunkhwa and Sindh provinces indicates that 23 districts are classified in IPC AMN Phase 4 (Critical), five districts in IPC AMN Phase 3 (Serious) and four districts in IPC AMN Phase 2 (Alert).

The districts classified in IPC Phase 4 (Critical) are: Jafferabad, Kachhi, Kalat, Kharan, Killa Abdullah, Kila Saifullah, Loralai, Naseerabad, Nushki, Pishin, Quetta, Washuk, Dadu, Jacobabad, Jamshoro, Khairpur, Mirpur Khas, Naushehro Feroz, Kambar Shahdad kot, Sanghar, Tharparkar, Thatta and Umerkot. The districts of Khuzdar, Matiari, Sukkur, Kohistan Lower and Nowshera are classified in IPC Phase 3 (Serious), whereas Upper Dir, Swat, Malakand and Charsadda appear in IPC Phase 2 (Alert).

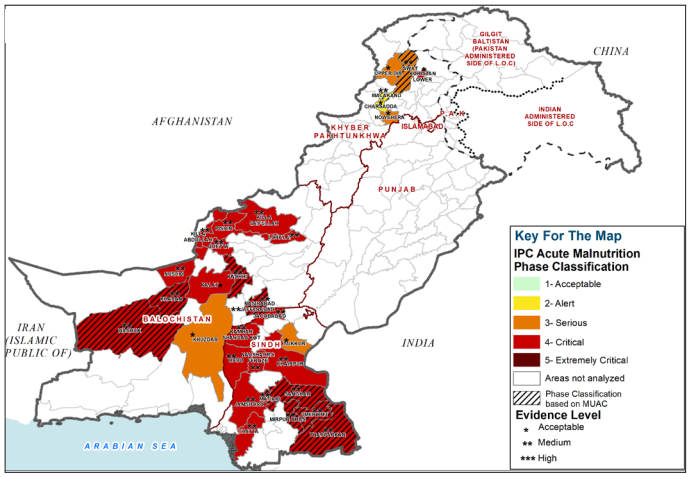
During the projected period (October 2023 - January 2024), the AMN Phase classification of Upper Dir and Swat is expected to deteriorate from IPC Phase 2 (Alert), to IPC Phase 3 (Serious), whereas Matiari and Kohistan Lower's situations are also likely to deteriorate from IPC Phase 3 (Serious) to IPC Phase 4 (Critical). Compared to the current analysis period, the Phase classification for the remaining districts is expected to remain unchanged during the projected period, regardless of seasonal fluctuations in acute malnutrition rates (whether they improve, worsen, or stay the same).

Acute malnutrition is influenced by a combination of contributing factors, including insufficient food quality and quantity within households, inadequate sanitation coverage, elevated rates of diarrhea, acute respiratory infections and fever, as well as a poor healthcare-seeking behavior. Furthermore, the districts face additional challenges such as suboptimal exclusive breastfeeding rates and a high prevalence of malnutrition among pregnant and lactating women (PLW) in several areas. The impact of the 2022 flooding further exacerbated the problem of acute malnutrition in most flood-affected districts, as it disrupted the health system and hindered access to healthcare services.

Current Acute Malnutrition | March - September 2023



Projected Acute Malnutrition | October 2023 - January 2024



Contributing factors

Food insecurity

Insufficient food quality and quantity within households with very low levels of food consumption among children 6-23 months

Poor childcare practices

Poor breastfeeding, early childbearing, low birth weight, and malnutrition among pregnant and lactating women (PLWs) further exacerbated the situation.

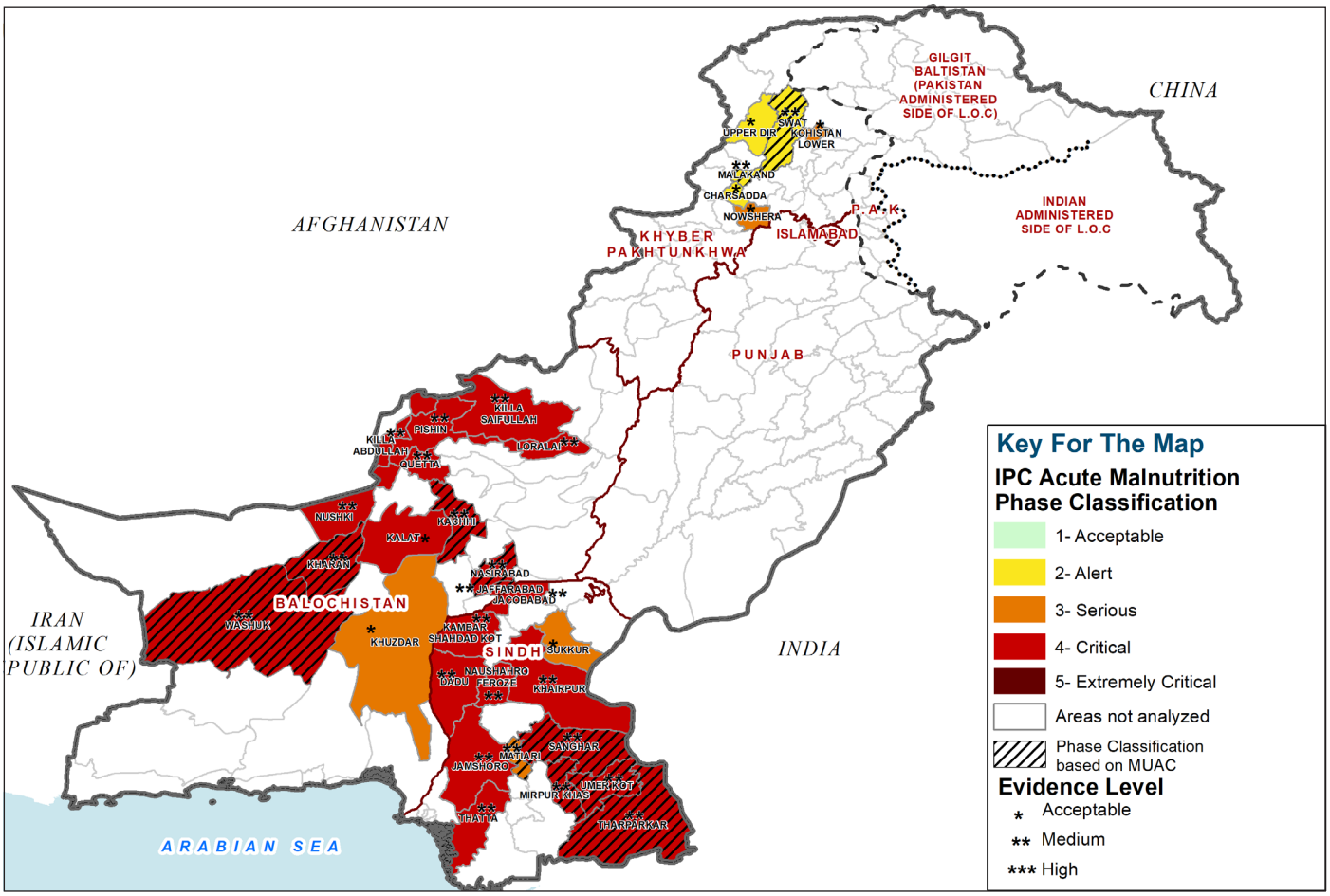
Diseases

Elevated rates of diarrhea, acute respiratory infections (ARI), fever worsen by suboptimal health-seeking behavior.

Impact of 2022 flooding

The acute malnutrition situation in flood-prone districts was worsened by the 2022 flooding, disrupting access to vital services like healthcare, safe drinking water, and sanitation.

IPC ACUTE MALNUTRITION CURRENT SITUATION MAP (MARCH – SEPTEMBER 2023)



IPC ACUTE MALNUTRITION CURRENT SITUATION OVERVIEW (MARCH – SEPTEMBER 2023)

For the current period of analysis and of the 32 districts in Balochistan, Khyber Pakhtunkhwa and Sindh provinces included in this analysis, 23 districts are classified in IPC AMN Phase 4 (Critical), five appear in IPC AMN Phase 3 (Serious) and four districts in IPC AMN Phase 2 (Alert). It is important to note that the current analysis period aligns with the post-harvest/summer/monsoon season, during which acute malnutrition levels are typically high. These elevated levels of acute malnutrition in the districts analysed underscore the urgent need for a comprehensive public health response to address this pressing issue.

Over 2.14 million children aged 6 - 59 months living in these 32 districts are affected by acute malnutrition and are in urgent need of treatment. The total number of children with moderate (MAM) and severe acute malnutrition (SAM) are respectively 1,544,910 and 598,802. The district of Tharparkar present the highest number of acute malnourished children (240,140), followed by Quetta (186,803), Khairpur (170,143), Umerkot (151,008) and Dadu (129,673), all classified in IPC AMN Phase 4 (Critical).[1]

Contributing factors

In the analysed districts across three provinces, approximately 64 percent of the population faces multidimensional poverty. The primary contributing factors contributing to acute malnutrition encompass a range of challenges, including the inadequate quality and quantity of food, heightened food insecurity, insufficient sanitation coverage, elevated rates of diarrhea, acute respiratory infections (ARIs), and fever, as well as suboptimal health-seeking behavior. Furthermore, concerns arise from low to medium levels of exclusive breastfeeding, early childbearing, low birth weight, and a prevalence of malnutrition among pregnant and lactating women (PLWs) in various districts.

The acute malnutrition situation was further aggravated by the 2022 flooding, particularly in severely affected flood-prone districts. The flooding significantly disrupted access to essential services such as healthcare, safe drinking water, and sanitation, exacerbating acute malnutrition. To illustrate the extent of the impact, the provincial governments declared several districts as natural calamity-hit areas due to the heavy monsoon rainfall and subsequent flooding in 2022. Specifically, 23 districts in Sindh (out of these 12 are covered in this IPC analysis including one non-flood affected district), 17 in KP (six are covered in this analysis) and 32 districts in Balochistan (13 are covered in this analysis). Except for Tharparkar district from Sindh, all analysed districts experienced monsoon rains and flooding in 2022 to a varied extent (slight to severe) which affected millions of people and caused displacement. The *Kharif* (summer) season crops/orchards were damaged and animals perished. This resulted in reduced food production and consumption and adversely affected the livelihoods of millions of people. For detailed information on the primary factors contributing to acute malnutrition in each district, please refer to Annex 2.

Further, there are districts that are at the borderline of either IPC Phase 3 or IPC Phase 4 as shown in the Trend Analysis Table in Annex 4. The comparison with the findings of IPC acute food insecurity (AFI) analysis conducted in April 2023 shows that out of 32 districts included in both AFI and AMN analyses, all the 13 districts of Balochistan, 12 districts of Sindh (excluding Sukkur) and two districts of KP (Upper Dir and Kohistan Lower) are classified in IPC AFI Phase 3 (Crisis). For Sukkur, Charsadda, Malakand Nowshera and Swat, these areas were classified in IPC AFI Phase 2 (Stressed), for the current period (April - October 2023). In the case of the IPC acute malnutrition analysis, Khuzdar, Matiari, Sukkur, Kohistan Lower and Nowshera are classified in IPC AMN Phase 3 (Serious). Upper Dir, Swat, Malakand and Charsadda are in IPC AMN Phase 2 (Alert). The remaining districts (Jafferabad, Kachhi, Kalat, Kharan, Killa Abdullah, Kila Saifullah, Loralai, Naseerabad, Nushki, Pishin, Quetta, Washuk, Dadu, Jacobabad, Jamshoro, Khairpur, Mirpur Khas, Naushehro Feroz, Kambar Shahdad kot, Sanghar, Tharparkar, Thatta and Umerkot) are classified in more severe conditions, IPC AMN Phase 4 (Critical).

[1] Number of children affected by acute malnutrition based on GAM prevalence among children 6-59 months based on Weight-for-Height (WHZ) <-2 standard deviation (SD) or based on GAM prevalence among children 6-59 months based on MUAC <12.5 centimeter (CM). Out of 32 districts, GAM prevalence based on MUAC was considered for 12 districts (Matiari, Mirpur Khas, Sanghar, Tharparkar, Umerkot, Jafferabad, Naseerabad, Kachhi (Bolan), Kharan, Washuk, Swat and Malakand), whereas for remaining 20 districts, GAM prevalence based on WHZ was considered.

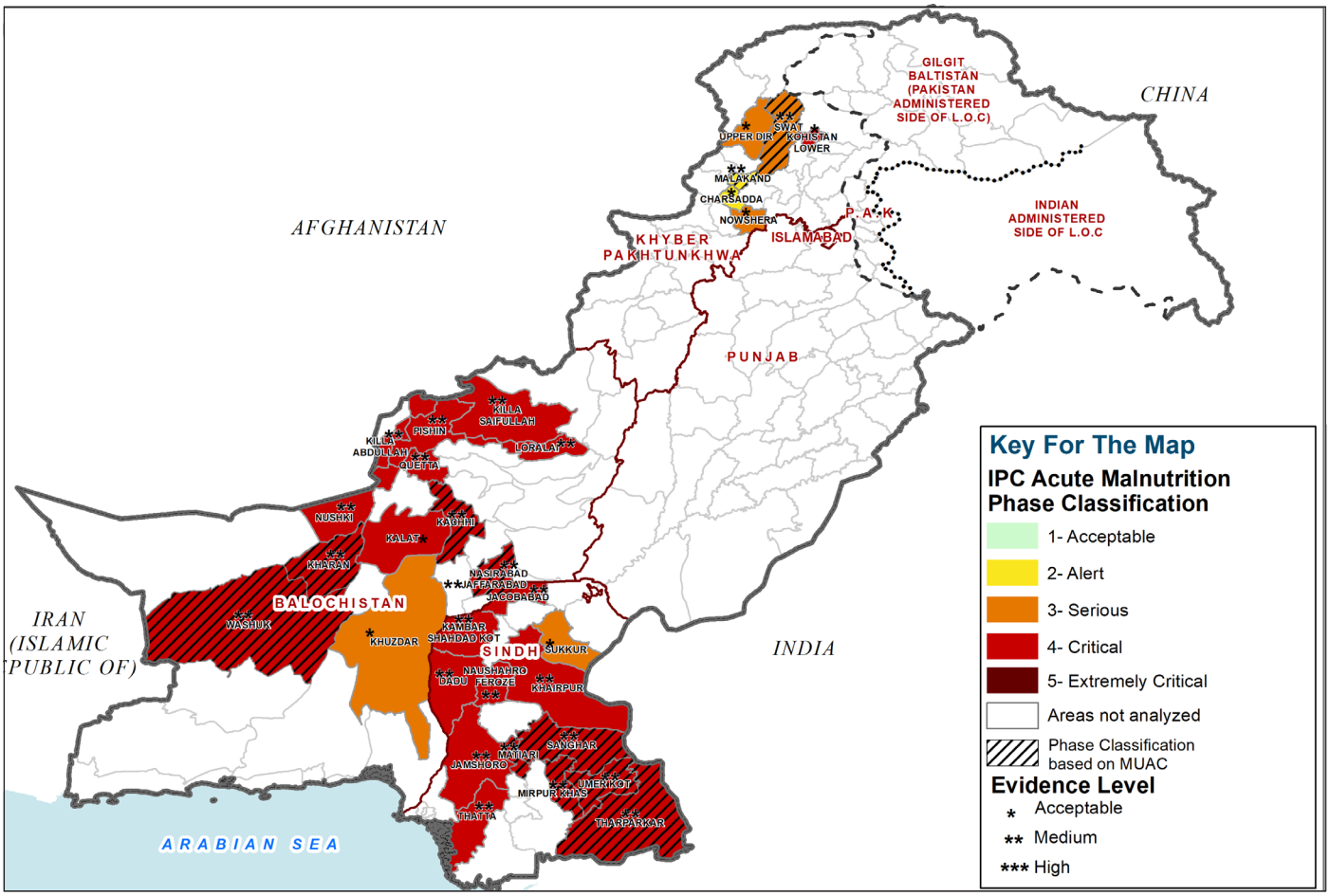
Trend analysis

The previous IPC AMN analysis (August 2021) was carried out in 9 districts in Sindh, of which four districts (Matiari, Thatta, Kambar Shahdad Kot and Umerkot) are also covered in this (June 2023) analysis. All the four districts were classified in IPC AMN Phase 4 (Critical), however, in this analysis Thatta, Umerkot and Kambar Shahdad Kot districts are classified in IPC AMN Phase 4 (Critical), whereas Matiari is in IPC AMN Phase 3 (Serious).

Available evidence consistently highlights the persistently high rates of acute malnutrition across all districts, with a particular emphasis on the provinces of Sindh and Balochistan. In fact, this is confirmed based on the findings from SMART surveys conducted in 2021 in Sindh, Multiple Indicators Cluster Surveys (MICS) conducted between 2018 and 2020, and the National Nutrition Survey (NNS) conducted in 2018.

The table in the Annex 4 illustrates the trend analysis of prevalence of acute malnutrition since 2018, based on different surveys conducted in the focal districts. Over this period, the prevalence of acute malnutrition has registered a consistent decline in some districts, while others have witnessed a fluctuating trend, with child malnutrition initially decreasing and subsequently increasing. It's important to note that the variations in child acute malnutrition may also be attributed to differences in survey methodologies and the influence of seasonal factors.

IPC ACUTE MALNUTRITION PROJECTED SITUATION MAP (OCTOBER 2023 – JANUARY 2024)



IPC ACUTE MALNUTRITION PROJECTED SITUATION OVERVIEW (OCTOBER 2023 – JANUARY 2024)

During the projection period (October 2023 - January 2024) which corresponds to winter/low acute malnutrition season, the phase classification of two districts (Upper Dir and Swat) is expected to deteriorate from Alert to Serious, whereas other two districts (Matiari and Kohistan Lower's) are expected to move from Serious to Critical. For the remaining 28 districts, it is projected that their phase classifications will remain unchanged, although there will be variations in acute malnutrition levels, with some districts experiencing an improvement, deterioration, or maintaining similar rates. Notably, the acute malnutrition situation is expected to remain stable in 15 districts, including Jafferabad, Kachhi ,Killa Abdullah, Naseerabad, Nushki, Charsadda, Malakand, Nowshera, Dadu, Jamshoro, Kambar Shahdad Kot, Khairpur, Mirpur Khas, Sanghar and Thatta. On the other hand, 17 districts are likely to see a slight deterioration in acute malnutrition, including Kalat, Kharan, Khuzdar, Kila Saifullah, Loralai, Pishin, Quetta, Washuk, Kohistan Lower, Upper Dir, Swat, Jacobabad, Matiari, Naushehro Feroz, Sukkur, Tharparkar, and Umerkot.

The comparison with the findings of IPC acute food insecurity (AFI) analysis conducted in April 2023 shows that out of 32 districts common in both AFI and AMN analyses, all 13 districts of Balochistan, 12 districts of Sindh (excluding Sukkur) and two districts of KP (Swat and Upper Dir), are classified in IPC AFI Phase 3 (Crisis); Kohistan Lower is classified in IPC AFI Phase 4 (Emergency), whereas Sukkur, Charsadda, Malakand and Nowshera are classified in IPC AFI Phase 2 (Stressed), during the projected period (November 2023 - January 2024). In the case of the acute malnutrition analysis for the projected period (October 2023 - January 2024), the IPC AMN Phase classification of Upper Dir and Swat is expected to deteriorate from Phase 2 (Alert), to IPC Phase 3 (Serious), whereas Matiari and Kohistan Lower's situations are likely to further deteriorate from IPC Phase 3 (Seriousl), to Critical IPC Phase 4. Compared to the current analysis period, the Phase classification for the remaining districts is expected to remain consistent during the projected period, regardless of seasonal fluctuations in acute malnutrition rates (whether they improve, worsen, or stay the same).

Based on the available data and expert opinion of the stakeholders involved in this analysis, most of the contributing factors to acute malnutrition are either expected to remain at the current levels (poor) or deteriorate further in some districts during the projection period, which would be in winter and in the lean period. The factors that are likely to deteriorate the acute malnutrition situation in some districts are the seasonal fluctuations in disease prevalence, such as Acute Respiratory Infections (ARI) and malaria, which tend to increase during the winter period. Additionally, limited access to healthcare services during this time is expected to compound health challenges. Furthermore, the quality and quantity of food consumption are anticipated to deteriorate in some districts. This deterioration is attributed to an anticipated lack of improvement in food security conditions, driven by persistently high food prices, restricted livelihood opportunities, and reduced accessibility to food markets during the winter and lean periods.

SUMMARY TABLE OF CHILDREN IN NEED OF TREATMENT DUE TO ACUTE MALNUTRITION

Total No. of Cases of Children (6-59 Months) in Need of Treatment					
	Districts	Number of 6-59 months children	GAM Treatment	MAM Treatment	SAM Treatment
Balochistan	Jaffarabad	83,014	26,116	9,281	16,835
	Kachhi	44,473	13,991	4,972	9,019
	Kalat	66,171	28,387	14,968	13,419
	Kharan	25,884	24,765	21,266	3,499
	Khuzdar	132,384	45,090	28,913	16,177
	Killa Abdullah	129,452	54,862	43,755	11,107
	Killa Saifullah	55,461	23,504	18,746	4,759
	Loralai	62,098	26,317	20,989	5,328
	Nasirabad	81,767	25,724	9,142	16,582
	Nushki	29,214	12,685	9,343	3,342
	Pishin	122,959	52,110	41,560	10,550
	Quetta	430,223	186,803	137,585	49,218
	Washuk	27,502	26,314	22,595	3,718
	Total	1,290,601	546,669	383,114	163,554
Khyber Pakhtunkhwa	Charsadda	252,317	61,666	45,266	16,401
	Kohistan Lower	32,230	8,463	3,855	4,609
	Malakand	112,385	3,506	2,922	584
	Nowshera	245,990	69,714	46,689	23,025
	Swat	378,565	11,811	9,843	1,969
	Upper Dir	155,537	34,374	21,433	12,941
	Total	1,177,024	189,535	130,007	59,528
Sindh	Dadu	286,633	129,673	89,430	40,243
	Jacobabad	151,007	68,315	47,114	21,201
	Jamshoro	166,183	90,304	64,811	25,492
	Kambar Shahdad Kot	206,453	93,399	64,413	28,986
	Khairpur	376,089	170,143	117,340	52,803
	Matiari	119,694	34,855	27,697	7,158
	Mirpur Khas	230,588	67,147	53,358	13,789
	Naushahro Feroze	247,530	111,982	77,229	34,753
	Sanghar	314,479	91,576	72,770	18,806
	Sukkur	232,933	73,886	52,084	21,803
	Tharparkar	269,276	240,140	186,931	53,209
	Thatta	156,566	85,078	61,061	24,017
	Umer Kot	169,330	151,008	117,549	33,460
	Total	2,926,762	1,407,509	1,031,788	375,720
Grand Total		**5,394,387**	**2,143,712**	**1,544,910**	**598,802**

RECOMMENDATIONS FOR ACTION

Response Priorities

Ensuring treatment for all children with acute malnutrition is a top priority. The very high magnitude of the problem warrants more attention and scaling up of the existing treatment programmes. Improving early detection mechanisms for children suffering from acute malnutrition is recommended in order to refer them for treatment before the situation gets worse. This could be particularly effective for children with moderate acute malnutrition in preventing them from becoming severely malnourished. While ensuring national treatment for acute malnutrition is a priority, attention should also be given to addressing the major contributing factors, such as improving the quality and quantity of food consumed by children, and the sanitation coverage.

Immediate/Short Term Strategic Priority Response Objectives

- Scaling up of Emergency Response Plan (ERP) through nutrition sector;
- Increase the screening of acutely malnourished children through the Lady Health Workers (LHW) and the community workforce;
- Strengthen and scaling up of the Community Management of Acute Malnutrition (CMAM) programme;
- Strengthen Infant and Young Child Feeding (IYCF) practices;
- Cash and food assistance, ideally through Benazir Income Support Progarmme (BISP);
- Improve access to/availability of improved sanitation facilities;
- Community engagement (e.g., building community support groups; Behavioral Change Communication (BCC) regarding risk factors for acute malnutrition e.g. IYCF practices, health seeking behavior etc.);
- Increase the immunization and work on routine immunization defaulters;
- Introduce vaccination campaign in the uncovered areas or areas with low vaccination rates;
- Improved access to nutrition centers (OTP, NSC) with availability of nutrition commodities for malnourished children;
- Multi-sectoral nutrition sensitive response through relevant sectors;
- Introduction of disaster-resilient and climate smart agriculture in the lean period including kitchen gardening, tunnel farming etc;
- Livelihood and skill-based trainings;
- Improve literacy specifically mother's education;
- Improved adolescent and maternal nutrition and engage adolescents in nutrition interventions;
- Capacity-building for healthcare providers on the management and treatment of acute malnutrition.

Medium to Long Term Strategic Priority Response Objectives

- Introduce nutrition sensitive interventions;
- Strengthen health systems through operationalising non-functioning health facilities and data accessibility for crucial nutrition and health indicators;
- Fill the workforce gaps by deploying technical human resource at the health facilities;
- Introduce livelihoods interventions to strengthen communities and build resilience;
- Introduce new farming techniques to ensure timely availability of food items;
- Strengthen local markets and create linkages with the external sources to enhance income and upgrade livelihood status;
- Integrated early childhood development (ECD);

- Develop water, sanitation, and hygiene (WASH) infrastructure;
- Advocacy and policy reform;
- Develop fresh approaches (such as family MUAC) and equip mothers and other caregivers;
- Intensify and expand food fortification (wheat and oil);
- Plan, scale up and strengthen multi-sectoral interventions such as 1,000-day human capital programme;
- Strengthening of data monitoring and evaluation and need to organise a lesson learning workshop as well as a nutrition data clinics workshop.

Situation monitoring and update

Once new data are available, update or another round of IPC Acute Malnutrition analysis may be carried out to ascertain the updated situation of acute malnutrition. The acute malnutrition levels in other districts not covered in this analysis are also of great concern. It is important to gather data and include other districts in the next IPC AMN analysis.

Risk factors to monitor

- Seasonal or sudden disease outbreaks: malaria, ARI and diarrhoea outbreaks;
- Food insecurity attributed to rising food prices (food inflation), reduction in income due to limited livelihood opportunities;
- General inflation;
- Low vaccination coverage;
- WASH services - Poor sanitation practices;
- Infant and Young Child Feeding practices;
- Reproductive health services (neonatal, infant, under-five and maternal mortality) ;
- Unstable security situation;
- Insufficient nutrition supplies;
- Natural calamities (flash floods and earthquake in some area)- flooding conditions may lead to food shortage and disruption of nutrition services and supplies;
- Cold wave/extreme winter;
- Incomplete immunization;
- Plant and animal diseases.

PROCESS AND METHODOLOGY

A team of nutrition, health, WASH, food security and statistics experts working at federal and provincial ministries/departments, UN organizations and NGOs (both national and international) in Pakistan carried out the analysis process using the standard IPC Acute Malnutrition version 3.1 protocols. These experts represented the Ministry of National Food Security and Research, Ministry of Planning, Development and Special Initiatives, National Disaster Management Authority (NDMA), Provincial Health Departments of Sindh, Balochistan and Khyber Pakhtunkhwa, Provincial Bureaus, Provincial Disaster Management Authorities (PDMAs) , Provincial Crop Reporting Services, Agriculture Departments, Provincial Livestock Departments , Accelerated Action Plan for Reduction of Stunting and Malnutrition (AAP-Health) Sindh, People's Primary Healthcare Initiative (PPHI)-Sindh, Welthungerhilfe (WHH), Secours Islamique France (SIF), ACTED, Save the Children, Islamic Relief, International Rescue Committee (IRC), Rural Support Programme Network (RSPN), Action Against Hunger (ACF), Concern Worldwide, Care International, Balochistan Rural Support Programme (BRSP), Sarhad Rural Support Programme (SRSP), Youth Organization (YO), Tameer-e-Khalq Foundation (TKF), Community Development Foundation (CDF), Strengthening Participatory Organization (SPO), FPHC, CERD and UN Agencies (FAO, WFP, UNICEF, WHO). The contribution of these experts/analysts in completing this analysis is highly acknowledged.

The IPC training and analysis workshop took place between 1 and 7 June 2023 in Quetta and was technically supported by the IPC Global Support Unit (GSU). Prior to the analysis, all analysts underwent a refresher training on the IPC Acute Malnutrition scale. This training was based on the IPC Technical Manual version 3.1. All participants who took part in the training were also involved in the analysis.

The support of Balochistan University of Information Technology, Engineering and Management Sciences

(BUITEMS) for hosting the IPC workshop at its Training Hall in Quetta and extending extensive facilitation is highly appreciated.

The data used in the analysis was organized according to the IPC analytical framework and includes data on contributing factors and outcome indicators of acute malnutrition. The data was collected from multiple sources listed below and the analysis was conducted by the analysis team. Different data sources were used for phase classification of the districts as follows:

- FSLA (GAM based on MUAC) data was used by clustering of 2-3 districts for Swat, Malakand, Sanghar, Mirpur Khas, Matiari, Tharparkar, Umerkot, Jafferabad, Naseerabad, Kachhi, Kharan and Washuk;
- Historical data of NNS 2018 and MICS Surveys in 2018-20 for Charsadda, Nowshera, Upper Dir, Kohistan Lower, Sukkur, Kalat and Khuzdar
- SMART surveys conducted by RSPN in Dadu and Jamshoro and by UNICEF in Quetta and Killa Abdullah in May 2023
    - Quetta-GAM based on WHZ of Quetta's SMART survey also used for Nushki district;
    - Killa Abdullah-GAM based on WHZ of Killa Abdullah's SMART survey also used for Pishin, Killa Saifullah and Loralai districts;
    - Dadu-GAM based on WHZ of Dadu's SMART survey also used for Kambar Shahdad Kot, Khairpur, Naushehro Feroze and Jacobabad districts;
    - Jamshoro-GAM based on WHZ of Jamshoro's SMART survey also used for Thatta district.

Sources

The data used in this analysis mainly came from the SMART surveys[2], Food Security and Livelihood Assessment (FSLA)[3], SMART Survey by ACF and WFP in 2021 in Sindh, Multiple Indicator Cluster Survey (MICS) surveys conducted in the three provinces (2018-2020), National Nutrition Survey (NNS 2018), Pakistan Social & Living Standards Measurement (PSLM) Survey 2019-20. Additionally, CMAM Programme data of AAP-Health, Sindh, Emergency Operation Cell (EOC) of Polio, Expanded Programme of Immunization (EPI), and District Health Information System (DHIS) data of Health Department of provinces were also considered. The contribution of UNICEF, RSPN, provincial bureaus of Statistics and health departments of Sindh, Balochistan and KP for sharing their data is highly acknowledged.

[2] Conducted by UNICEF and Rural Support Programme Network (RSPN) in two districts each in Sindh and Balochistan provinces in May 2023

[3] The household level Food Security and Livelihood Assessment (FSLA) was conducted by FAO in collaboration with Provincial Disaster Management Authorities (PDMAs) of Sindh, Balochistan and Khyber Pakhtunkhwa, WFP, UNICEF, Islamic Relief, Save the Children, Welthungerhilfe (WHH) and ACTED, in 43 flood affected/vulnerable districts of Sindh, Balochistan and Khyber Pakhtunkhwa in February/March 2023.

Limitations of the analysis

- Initially, the plan was to conduct IPC AMN analysis for 36 districts but because of lack of recent data to meet the IPC requirements, four districts were dropped from the analysis.
- FSLA's nutrition data could not qualify the plausibility checks for several districts due to a smaller number of children whose MUAC/anthropometry measurements were taken; age ratio, sex ratio, digit preferences etc.
- SMART surveys by UNICEF and RSPN filled in the data gap for few districts.
- Similar and/or nearby protocol of IPC was used for applying the GAM prevalence of SMART surveys to few similar districts.
- For slight/moderately flood affected districts for which FSLA or SMART surveys data could not be used, historical data of NNS and MICS surveys conducted during 2018-20 was used.
- Availability of recent data on some contributing factors representative at the district level, was a major limitation. In these cases, inference was made based on available data.

Acknowledgements

The IPC Level 1 training was facilitated by Moctar Moussa (IPC Nutrition Coordinator) and Tomas Zaba (IPC Nutrition Expert) virtually and co-facilitated by Raja Ajmal Jahangeer (FAO), Aman ur Rehman Khan (WFP), Kashif Ali and Imran Jatoi (UNICEF), Muhammad Kazim Jafri (Sindh Bureau of Statistics) and Amir Ali.

The IPC analysis was facilitated by Moctar Moussa and Tomas Zaba and co-facilitated by Raja Ajmal Jahangeer, Aman ur Rehman Khan, Kashif Ali, Imran Jatoi, Muhammad Kazim Jafri, Sarfraz Bhutto (CRS Sindh), Meena Iqbal (RSPN), Shafqatullah (Concern Worldwide) and Amir Ali. The support of Moctar Moussa and Tomas Zaba for data quality review, review of analysis and guidance before, during and after the IPC AMN workshop; support of Mah Jabeen and Saeed Alam (UNICEF), Imran Jatoi, Kashif Khan, Muhammad Kazim and Akbar Khan (KP Bureau of Statistics), Meena Iqbal (RSPN) and Muhammad Temoor (Sindh Health Department) for providing the data for the analysis, support of Muhammad Afzal (FAO) for uploading the data in google drive share folder, and ensuring access of workshop participants to data and support of Mehwish Ali and Areesha Asghar (FAO) for preparation AMN maps is highly appreciated. The critical support of Umer Afzal for organizing the IPC AMN workshop and preparing this brief is highly acknowledged. The valuable support of Provincial Health Departments of Sindh, Balochistan and Khyber Pakhtunkhwa for providing patronage for this analysis and attending the IPC AMN workshop by their officials is also highly acknowledged.

Further, financial support from ECHO, IPC GSU, UNICEF, WFP and Save the Children for co-financing this IPC workshop is highly acknowledged.

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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This analysis has been conducted under the patronage of the Provincial Health Departments, of Sindh, Balochistan and Khyber Pakhtunkhwa. It has benefited from the technical and financial support of IPC Global Support Unit.

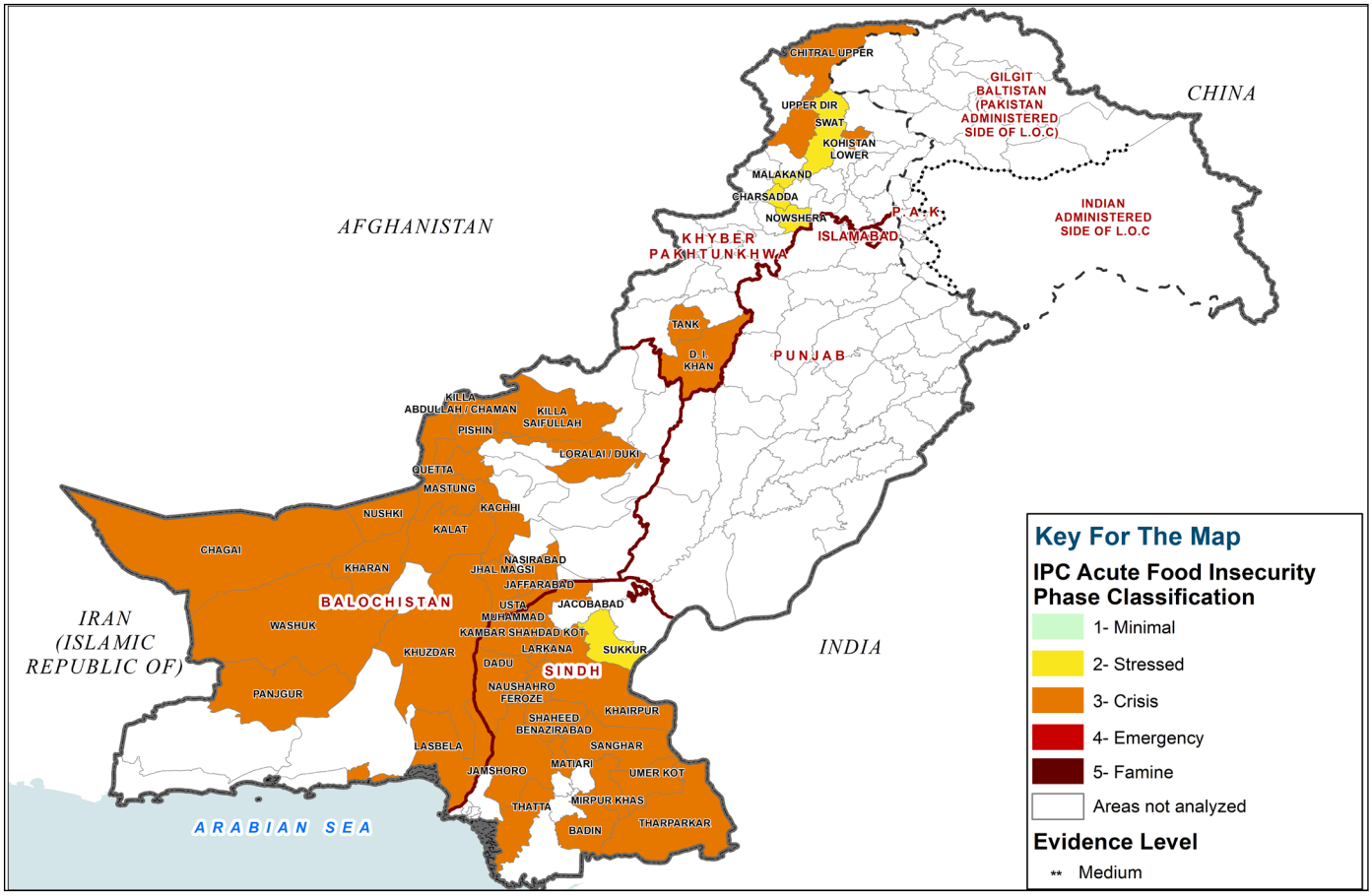
Classification of malnutrition was conducted using the IPC protocols, which are developed and implemented worldwide by the IPC Global Partnership - Action Against Hunger, CARE, CILSS, EC-JRC , FAO, FEWS NET, Global Food Security Cluster, Global Nutrition Cluster, IGAD, Oxfam, PROGRESAN-SICA, SADC, Save the Children, UNICEF and WFP.

IPC AMN Analysis Partners:

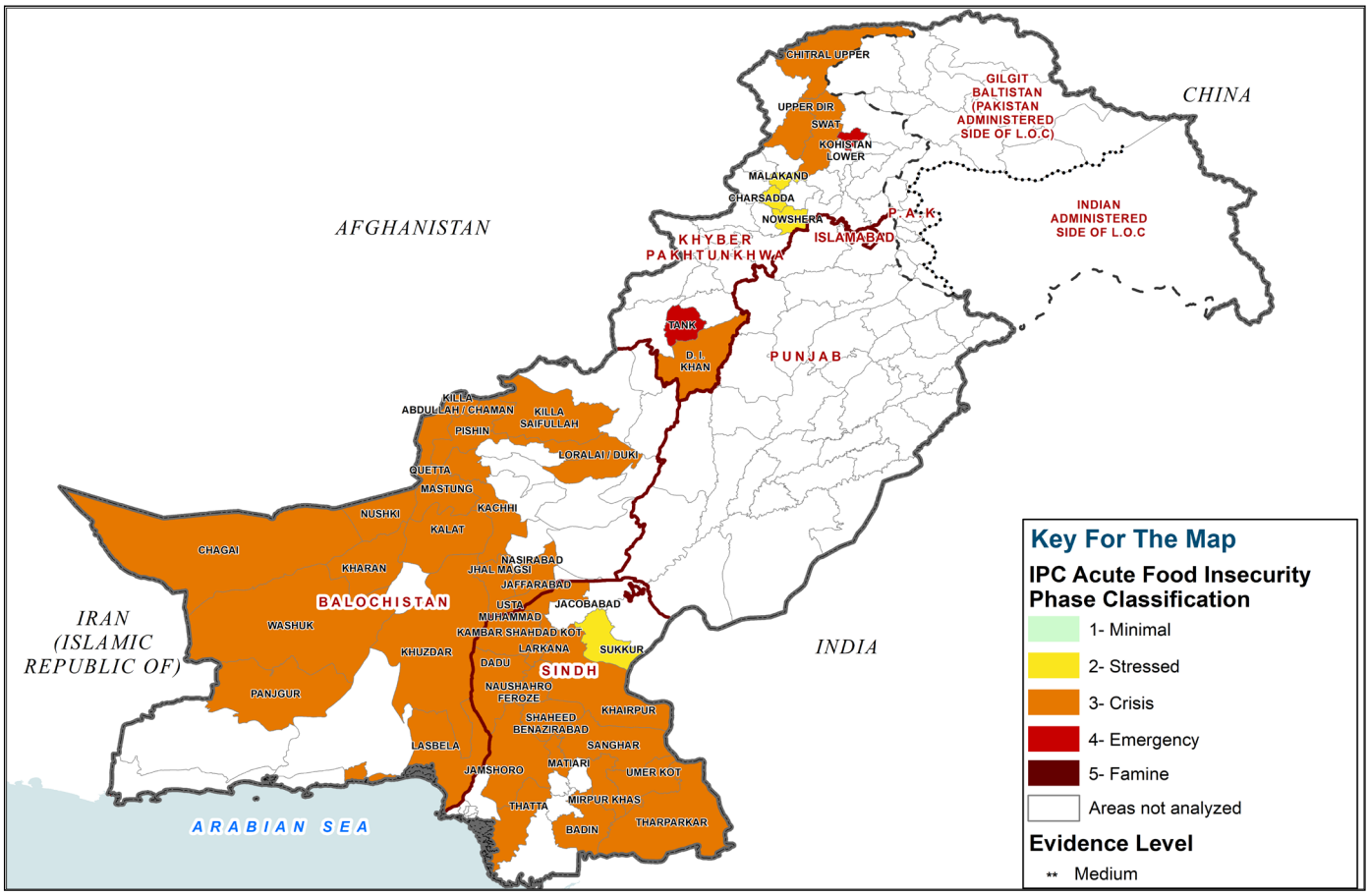
ANNEX 1: RESULTS OF OTHER IPC CLASSIFICATIONS

As per the results of IPC Acute Food Insecurity Analysis conducted in April 2023 for 43 vulnerable/flood-affected districts of Sindh, Balochistan and Khyber Pakhtunkhwa, five districts were classified in IPC AFI Phase 2 (Stressed), and remaining 38 in IPC AFI Phase 3 (Crisis), in the current period. In the projected period, it is expected that three districts will be in IPC AFI Phase 2 (Stressed), two will be in IPC AFI Phase 4 (Emergency), whereas the remaining 38 districts will be in IPC AFI Phase 3 (Crisis), as shown in the maps below for the current and projected period.

Current Acute Food Insecurity | April - October 2023



Projected Acute Food Insecurity | November 2023 - January 2024



ANNEX 2 : SUMMARY OF FACTORS CONTRIBUTING TO ACUTE MALNUTRITION

Sindh

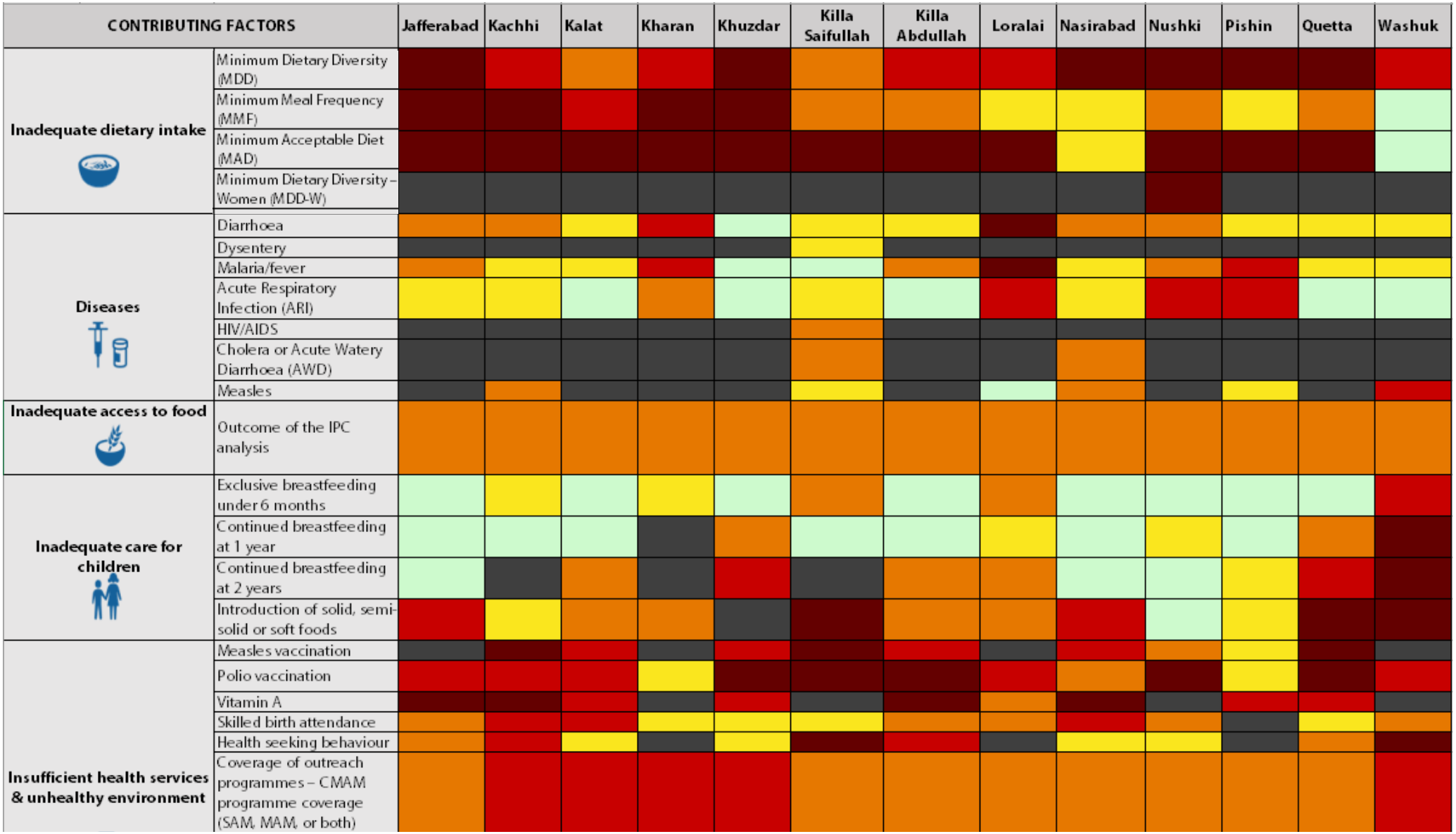
CONTRIBUTING FACTORS		Dadu	Jacobabad	Jamshoro	Khairpur	Kambar Shahdadkot	Matiari	Mirpurkhas	Nausheroferoze	Sanghar	Sukkur	Tharparkar	Thatta	Umerkot
Inadequate dietary intake	Minimum Dietary Diversity (MDD)													
	Minimum Meal Frequency (MMF)													
	Minimum Acceptable Diet (MAD)													
	Minimum Dietary Diversity – Women (MDD-W)													
Diseases	Diarrhoea													
	Dysentery													
	Malaria/fever													
	Acute Respiratory Infection (ARI)													
	HIV/AIDS													
	Cholera or Acute Watery Diarrhoea (AWD)													
	Measles													
Inadequate access to food	Outcome of the IPC analysis													
Inadequate care for children	Exclusive breastfeeding under 6 months													
	Continued breastfeeding at 1 year													
	Continued breastfeeding at 2 years													
	Introduction of solid, semi-solid or soft foods													
Insufficient health services & unhealthy environment	Measles vaccination													
	Polio vaccination													
	Vitamin A supplementation													
	Skilled birth attendance													
	Health seeking behaviour													
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)													
	Access to a sufficient quantity of water													
	Access to sanitation facilities													
	Access to an improved source of drinking water													

Sindh

CONTRIBUTING FACTORS		Dadu	Jacobabad	Jamshoro	Khairpur	Kambar Shahdadkot	Matiari	Mirpurkhas	Nausheroferoze	Sanghar	Sukkur	Tharparkar	Thatta	Umerkot
Structural Causes	Human capital													
	Physical capital													
	Financial capital													
	Natural capital													
	Social capital													
	Policies, Institutions and Processes													
	Usual/Normal Shocks													
	Recurrent Crises due to Unusual Shocks													
Other Nutrition Issues	Anaemia among children 6-59 months													
	Anaemia among pregnant women													
	Anaemia among non-pregnant women													
	Vitamin A deficiency among pre-school children (6 – 71 months)													
	Vitamin A deficiency among non-pregnant women (15 – 49 years)													
	Low birth weight													
	Fertility rate													
	Nutritional status of WRA (15-49 years													

ANNEX 2 : SUMMARY OF FACTORS CONTRIBUTING TO ACUTE MALNUTRITION

Balochistan



Balochistan

CONTRIBUTING FACTORS		Jafferabad	Kachhi	Kalat	Kharan	Khuzdar	Killa Saifullah	Killa Abdullah	Loralai	Nasirabad	Nushki	Pishin	Quetta	Washuk
Insufficient health services & unhealthy environment	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)													
	Access to a sufficient quantity of water													
	Access to sanitation													
	Access to an improved source of drinking water													
Structural Causes	Human capital													
	Physical capital													
	Financial capital													
	Natural capital													
	Social capital													
	Policies, Institutions and Processes													
	Usual/Normal Shocks													
	Recurrent Crises due to Unusual Shocks													
Other Nutrition Issues	Anaemia among children 6-59 months													
	Anaemia among pregnant women													
	Anaemia among non-pregnant women													
	Vitamin A deficiency among pre-school children (6 – 71 months)													
	Vitamin A deficiency among non-pregnant women (15 – 49 years)													
	Low birth weight													
	Fertility rate													
	Nutritional status of WRA (15-49 years													

ANNEX 2 : SUMMARY OF FACTORS CONTRIBUTING TO ACUTE MALNUTRITION

Khyber Pakhtunkhwa

CONTRIBUTING FACTORS		Nowshera	Malakand	Kohistan Lower	Dir Upper	Charsadda	Swat
Inadequate dietary intake	Minimum Dietary Diversity (MDD)						
	Minimum Meal Frequency (MMF)						
	Minimum Acceptable Diet (MAD)						
	Minimum Dietary Diversity – Women (MDD-W)						
Diseases	Diarrhoea						
	Dysentery						
	Malaria/fever						
	Acute Respiratory Infection (ARI)						
	HIV/AIDS						
	Cholera or Acute Watery Diarrhoea (AWD)						
	Measles						
Inadequate access to food	Outcome of the IPC analysis						
Inadequate care for children	Exclusive breastfeeding under 6 months						
	Continued breastfeeding at 1 year						
	Continued breastfeeding at 2 years						
	Introduction of solid, semi-solid or soft foods						
Insufficient health services & unhealthy environment	Measles vaccination						
	Polio vaccination						
	Vitamin A supplementation						
	Skilled birth attendance						
	Health seeking behaviour						
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)						
	Access to a sufficient quantity of water						
	Access to sanitation facilities						
	Access to an improved source of drinking water						

Khyber Pakhtunkhwa

CONTRIBUTING FACTORS		Nowshera	Malakand	Kohistan Lower	Dir Upper	Charsadda	Swat
Structural Causes	Human capital						
	Physical capital						
	Financial capital						
	Natural capital						
	Social capital						
	Policies, Institutions and Processes						
	Usual/Normal Shocks						
	Recurrent Crises due to Unusual Shocks						
Other Nutrition Issues	Anaemia among children 6-59 months						
	Anaemia among pregnant women						
	Anaemia among non-pregnant women						
	Vitamin A deficiency among pre-school children (6 – 71 months)						
	Vitamin A deficiency among non-pregnant women (15 – 49 years)						
	Low birth weight						
	Fertility rate						
	Nutritional status of WRA (15-49 years						

1	VERY LOW risk factor
2	LOW risk factor
3	MEDIUM risk factor
4	HIGH risk factor
5	VERY HIGH risk factor
8	No data available

ANNEX 3: DETAILED TABLE OF CHILDREN IN NEED OF TREATMENT DUE TO ACUTE MALNUTRITION

The expected number of cases of acute malnutrition among children was calculated using the following formula: npk, where n is the number of 6 - 59 months old children, p is the combined prevalence of SAM or MAM, and k is the incident correction factor. In line with the country practice, an incident correction factor of 1.6 was used. Number of 6-59 months children were obtained by applying the proportion of 13.5% to 2023 projected population of each district. The prevalence of GAM is based on WHZ or MUAC, whichever latest prevalence available from the most recent data sources; FSLA or SMART Surveys conducted in 2023, or MICS/NNS surveys for 7 districts for which recent data of FSLA/SMART surveys was not available.

Total No. of Cases of Children (6-59 Months) in Need of Treatment									
Provinces	Unit of analysis (Districts)	Total Population	Number of 6-59 months children	GAM based on WHZ/MUAC	MAM based on WHZ/MUAC	SAM based on WHZ/MUAC	GAM Treatment	MAM Treatment	SAM Treatment
Balochistan	Jaffarabad*	614,918	83,014	12,1%	4,3%	7,8%	26,116	9,281	16,835
	Kachhi*	329,431	44,473	12,1%	4,3%	7,8%	13,991	4,972	9,019
	Kalat**	490,154	66,171	16,5%	8,7%	7,8%	28,387	14,968	13,419
	Kharan*	191,731	25,884	36,8%	31,6%	5,2%	24,765	21,266	3,499
	Khuzdar**	980,622	132,384	13,1%	8,4%	4,7%	45,090	28,913	16,177
	Killa Abdullah	958,907	129,452	16,3%	13%	3,3%	54,862	43,755	11,107
	Killa Saifullah	410,821	55,461	16,3%	13%	3,3%	23,504	18,746	4,759
	Loralai	459,986	62,098	16,3%	13%	3,3%	26,317	20,989	5,328
	Nasirabad*	605,679	81,767	12,1%	4,3%	7,8%	25,724	9,142	16,582
	Nushki	216,402	29,214	16,7%	12,3%	4,4%	12,685	9,343	3,342
	Pishin	910,806	122,959	16,3%	13%	3,3%	52,110	41,560	10,550
	Quetta	3,186,838	430,223	16,7%	12,3%	4,4%	186,803	137,585	49,218
	Washuk*	203,716	27,502	36,8%	31,6%	5,2%	26,314	22,595	3,718
	Total	9,560,009	1,290,601				546,669	383,114	163,554

Total No. of Cases of Children (6-59 Months) in Need of Treatment									
Provinces	Unit of analysis (Districts)	Total Population	Number of 6-59 months children	GAM based on WHZ/MUAC	MAM based on WHZ/MUAC	SAM based on WHZ/MUAC	GAM Treatment	MAM Treatment	SAM Treatment
Khyber Pakh-tunkhwa	Charsadda**	1,869,014	252,317	9,4%	6,9%	2,5%	61,666	45,266	16,401
	Kohistan Lower**	238,738	32,230	10,1%	4,6%	5,5%	8,463	3,855	4,609
	Malakand*	832,481	112,385	1,2%	1,0%	0,2%	3,506	2,922	584
	Nowshera**	1,822,150	245,990	10,9%	7,3%	3,6%	69,714	46,689	23,025
	Swat*	2,804,187	378,565	1,2%	1%	0,2%	11,811	9,843	1,969
	Upper Dir**	1,152,128	155,537	8,5%	5,3%	3,2%	34,374	21,433	12,941
	Total	8,718,698	1,177,024				189,535	130,007	59,528
Sindh	Dadu	2,123,210	286,633	17,4%	12%	5,4%	129,673	89,430	40,243
	Jacobabad	1,118,567	151,007	17,4%	12%	5,4%	68,315	47,114	21,201
	Jamshoro	1,230,983	166,183	20,9%	15%	5,9%	90,304	64,811	25,492
	Kambar Shahdad Kot	1,529,280	206,453	17,4%	12%	5,4%	93,399	64,413	28,986
	Khairpur	2,785,848	376,089	17,4%	12%	5,4%	170,143	117,340	52,803
	Matiari*	886,625	119,694	11,2%	8,9%	2,3%	34,855	27,697	7,158
	Mirpur Khas*	1,708,062	230,588	11,2%	8,9%	2,3%	67,147	53,358	13,789
	Naushahro Feroze	1,833,553	247,530	17,4%	12%	5,4%	111,982	77,229	34,753
	Sanghar*	2,329,475	314,479	11,2%	8,9%	2,3%	91,576	72,770	18,806
	Sukkur**	1,725,433	232,933	12,2%	8,6%	3,6%	73,886	52,084	21,803
	Tharparkar*	1,994,637	269,276	34,3%	26,7%	7,6%	240,140	186,931	53,209
	Thatta	1,159,750	156,566	20,9%	15%	5,9%	85,078	61,061	24,017
	Umer Kot*	1,254,296	169,330	34,3%	26,7%	7,6%	151,008	117,549	33,460
	Total	21,679,719	2,926,762				1,407,509	1,031,788	375,720
Grand Total			**39,958,426**	**5,394,387**			**2,143,712**	**1,544,910**	**598,802**

*GAM is based on MUAC. For remaining districts, GAM is based on WHZ.
** In the seven districts, GAM is based on historical data of MICS 2018-20 or NNS 2018 surveys.

ANNEX 4: ACUTE MALNUTRITION PREVALENCE TRENDS IN FOCUSED DISTRICTS (2018 -2023 SURVEYS)

Provinces	Unit of analysis (Districts)	GAM based on WHZ (SMART Survey 2023)	GAM based on MUAC (FSLA 2023)	GAM based on WHZ (SMART Survey 2021 in Sindh)	GAM based on WHZ (MICS Surveys 2018-20)	GAM based on WHZ (NNS 2018)
Balochistan	Jaffarabad*		12.1%		12.3%	33.9%
	Kachhi*		12.1%		37.2%	29.6%
	Kalat**				16.5%	23.8%
	Kharan*		36.8%		1.4%	20.6%
	Khuzdar**				13.1%	8.2%
	Killa Abdullah	16.3%			6.0%	15.5%
	Killa Saifullah				26.2%	16.8%
	Loralai				12.7%	17.8%
	Nasirabad*		12.1%		0.3%	18.6%
	Nushki		36.8%		12.1%	23.1%
	Pishin		16.3%		2.6%	29.0%
	Quetta	16.7%			5.0%	19.7%
	Washuk*		36.8%		9.3%	16.6%
Khyber Pakhtunkhwa	Charsadda**				9.4%	0.2%
	Kohistan Lower**				3.9%	10.1%
	Malakand*		1.2%		11.3%	28.1%
	Nowshera**				10.9%	15.8%
	Swat*		1.2%		8.6%	4.5%
	Upper Dir**				8.5%	14.8%
Sindh	Dadu	17.4%			13.8%	19.2%
	Jacobabad				14.6%	30.5%
	Jamshoro	20.9%			16.2%	23.7%
	Kambar Shahdad Kot			19.5%	22.2%	27.5%
	Khairpur				8.8%	22.4%
	Matiari*		11.2%	15.2%	7.4%	23.9%
	Mirpur Khas*		11.2%		17.8%	28.6%
	Naushahro Feroze				9.6%	19.4%
	Sanghar*		11.2%		20.5%	21.7%
	Sukkur**				12.2%	19.5%
	Tharparkar*		34.3%		25.7%	33.3%
	Thatta			20.0%	17.5%	24.3%
	Umer Kot*		34.3%	26.4%	22.6%	32.2%

*GAM is based on MUAC. For remaining districts, GAM is based on WHZ.
** In the seven districts, GAM is based on historical data of MICS 2018-20 or NNS 2018 surveys.