South Sudan

The food insecurity levels remain elevated due to the impacts of the economic crisis, flooding and dry spells, low agricultural production, conflict and insecurity.

IPC ACUTE FOOD INSECURITY &
ACUTE MALNUTRITION ANALYSIS
October 2022 – July 2023
Issued: 03 November 2022

ACUTE FOOD INSECURITY									
CURRENT (OCTOBER-NOVEMBER 2022)			PROJECTED (DECEMBER 2022-MARCH 2023)			PROJECTED (APRIL - JULY 2023)			
6.64M	Phase 5	61 000 People in Catastrophe	6.31M	Phase 5	33 000 People in Catastrophe	7.76M	Phase 5	43 000 People in Catastrophe	
(53.6% of the	Phase 4	2 217 000 People in Emergency	(51.0% of the population)	Phase 4	1 966 000 People in Emergency	(62.7% of the population)	Phase 4	2 899 000 People in Emergency	
population) People facing severe acute	Phase 3	4 357 000 People in Crisis	People who will be facing	Phase 3	4 311 000 People in Crisis	People who will be facing	Phase 3	4 822 000 People in Crisis	
food insecurity (IPC Phase 3+)	Phase 2	3 731 000 People in Stress	severe acute food insecurity (IPC Phase 3+)	Phase 2	3 840 000 People in Stress	severe acute food insecurity (IPC Phase 3+)	Phase 2	3 080 000 People in Stress	
IN NEED OF URGENT ACTION	Phase 1	2 012 000 People minimally food insecure	IN NEED OF URGENT ACTION	Phase 1	2 223 000 People minimally food insecure	IN NEED OF URGENT ACTION	Phase 1	1 530 000 People minimally food insecure	

ACUTE MALNUTRITION JANUARY TO DECEMBER 2022

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1,403,596

Number of 6-59 months old children acutely malnourished IN NEED OF TREATMENT

345,893 SAM*

Number of cases

1,057,703

MAM**
Number of cases

737,812

Pregnant or lactating women acutely malnourished

IN NEED OF TREATMENT

How Severe, How Many¹ and When – In the current analysis period of October to November 2022, an estimated 6.64 million people (53.6% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 2.22 million people are facing Emergency (IPC Phase 4) acute food insecurity. An estimated 61,000 people are classified in Catastrophe (IPC Phase 5) acute food insecurity in Fangak, Canal/Pigi and Akobo of Jonglei State; Pibor County in the Greater Pibor Administrative Area. The most food insecure states between October and November 2022 where more than 50% of their populations are facing Crisis (IPC Phase 3) or worse acute food insecurity are Jonglei (68.0%), Unity (66.7%), Northern Bahr el Ghazal (61.9%), Upper Nile (58.5%), Warrap (57.1%), and Lakes (56.9%).

In the post-harvest projection period of **December 2022 to March 2023**, an estimated 6.31 million people (51.0% of the population) will likely face Crisis (IPC Phase 3) or worse acute food insecurity, with **33,000 people likely to be in Catastrophe** (IPC Phase 5) acute food insecurity in Akobo and Fangak of Jonglei State; and Pibor County of Greater Pibor Administrative Area. During this period, an estimated **1.97 million people are likely to face Emergency (IPC Phase 4)** acute food insecurity.

In the lean season projection period of April to July 2023, an estimated 7.76 million people (62.7% of the population) will likely face Crisis (IPC Phase 3) or worse acute food insecurity, with 43,000 people likely to be in Catastrophe (IPC Phase 5) acute food insecurity in Akobo, Canal/Pigi and Fangak counties of Jonglei State; and Leer and Mayendit counties of Unity State. During this period, an estimated 2.90 million people are likely to face Emergency (IPC Phase 4) acute food insecurity.

^{*} Severe Acute Malnutrition ** Moderate Acute Malnutrition

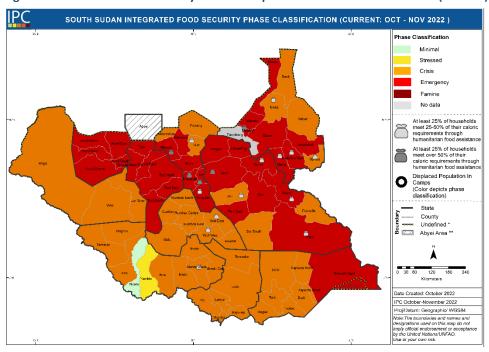
¹ Panyikang County in Upper Nile State, with a population of 66,927 people, has not been analysed and classified during this IPC because data collection was not possible in the County due to insecurity. As soon as the security situation improves, FSNMS data collection will be conducted and an update to this IPC analysis will be provided. For now, Panyikang County remains grey in all maps for IPC AFI and AMN.

Given the high levels of severe acute food insecurity in the country, there is need for immediate scale-up of multi-sectoral humanitarian assistance to save lives and prevent the total collapse of livelihoods in the affected counties, particularly those with a high share of populations in Emergency (IPC Phase 4) and Catastrophe (IPC Phase 5) acute food insecurity. Urgent action is also required for populations in Crisis (IPC Phase 3) acute food insecurity to protect their livelihoods and reduce household-level food consumption gaps. For populations in Minimal (IPC Phase 1) and Stressed (IPC Phase 2) acute food insecurity, there is need for resilience building support and enhanced disaster risk reduction (DRR) strategies to mitigate the effects of climate change.

- Where The most severe acutely food insecure populations are in locations with chronic vulnerabilities that have been worsened by frequent climate-related shocks (severe flooding and dry spells), the macro-economic crisis, conflict and insecurity, and low agricultural production. Between October and November 2022, 33 counties across the country are classified in Emergency (IPC Phase 4) acute food insecurity, 42 counties are classified in Crisis (IPC Phase 3) acute food insecurity, one county is classified in Stressed (IPC Phase 2) acute food insecurity, and one county is classified in Minimal (IPC Phase 1) acute food insecurity. In the post-harvest projection period of December 2022 to March 2023, 29 counties will likely be in Emergency (IPC Phase 4) acute food insecurity, 43 counties will likely be in Crisis (IPC Phase 3) acute food insecurity, 4 counties will likely be in Stressed (IPC Phase 2) acute food insecurity. In the lean-season projection period of April to July 2023, 47 counties will likely be in Emergency (IPC Phase 4) acute food insecurity, 29 counties will likely be in Crisis (IPC Phase 3) acute food insecurity, and one county will likely be in Stressed (IPC Phase 2) acute food insecurity.
- Why Food insecurity in South Sudan is driven by multiple shocks, including the macro-economic crisis caused by the depreciation of the local currency and the global impacts of the conflict in Ukraine, climatic shocks (floods and dry spells), conflict and insecurity, climate- and conflict-induced population displacements, persistent low agricultural production levels, and the cumulative effects of prolonged years of asset depletion that continue to erode households' coping capacities, and the loss of livelihoods. Access constraints and the lower than required humanitarian assistance in the face of increasing needs will likely result in an increase of acute food insecurity during the projection periods, especially during the lean season.

CURRENT IPC ACUTE FOOD INSECURITY SITUATION FOR OCTOBER TO NOVEMBER 2022

Figure 1: IPC Acute Food Insecurity Current Map for October - November 2022 (Current)



What is on the map?

33 counties are classified in Emergency (IPC Phase 4) acute food insecurity, 42 counties are classified in Crisis (IPC Phase 3) acute food insecurity, 1 county is classified in Stressed (IPC Phase 2) acute food insecurity, and 1 county is classified in Minimal (IPC Phase 1) acute food insecurity.

What is in the population table?

With the current levels of HFA (Humanitarian Food Assistance), 0.5% of the population (about 61,000 people) are in IPC Phase 5 (Catastrophe) acute food insecurity; 17.9% of the population (about 2.22 million people) are in IPC Phase 4 (Emergency) acute food insecurity; and 35.2% of the population (about 4.36 million people) are in IPC Phase 3 (Crisis) acute food insecurity.

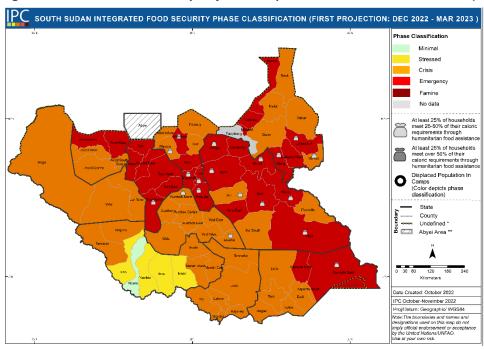
State	2022/2023 Population	Minimal	Stressed	Crisis	Emergency	Catastrophe
Central Equatoria	1,548,616	284,000	652,000	510,000	104,000	-
Eastern Equatoria	1,127,486	252,000	400,000	333,000	143,000	-
Jonglei	2,035,636	196,000	455,000	718,000	606,000	61,000
Lakes	1,212,052	185,000	337,000	517,000	173,000	-
Northern Bahr el Ghazal	936,932	94,000	263,000	350,000	230,000	-
Unity	1,125,769	114,000	261,000	480,000	271,000	-
Upper Nile	1,458,092	200,000	405,000	601,000	252,000	-
Warrap	1,296,510	246,000	311,000	413,000	327,000	-
Western Bahr el Ghazal	664,156	117,000	281,000	218,000	49,000	-
Western Equatoria	968,956	324,000	366,000	217,000	62,000	-
Total	12,374,205	2,012,000	3,731,000	4,357,000	2,217,000	61,000

Table 1: Estimation of populations for current period: October - November 2022

<u>Note</u>: A population in IPC Phase 3 and above does not necessarily reflect the full population in need of urgent action. This is because some households may be in IPC Phase 2 or even in IPC Phase 1, because of the effects of humanitarian assistance. The national population is estimated at 12,477,728; however, the total analyzed, and classified population is 12,410,801 because an estimated 66,927 people living in Panyikang County in Upper Nile State were not analyzed and classified due to the County being inaccessible during the FSNMS data collection exercise.

PROJECTED IPC ACUTE FOOD INSECURITY SITUATION FOR DECEMBER 2022 TO MARCH 2023

Figure 2: IPC Acute Food Insecurity Projection Map for December 2022 - March 2023 (Projection)



What is on the map?

29 counties are classified in Emergency (IPC Phase 4) acute food insecurity, 43 counties are classified in Crisis (IPC Phase 3) acute food insecurity, 4 counties are classified in Stressed (IPC Phase 2) acute food insecurity, and 1 county is classified in Minimal (IPC Phase 1) acute food insecurity.

What is in the population table?

With the planned levels of HFA, 0.3% of the population (about 33,000 people) will likely be in Catastrophe (IPC Phase 5) acute food insecurity; 15.9% of the population (about 1.97 million people) will likely be in Emergency (IPC Phase 4) acute food insecurity; and 34.8% of the population (about 4.31 million people) will likely be in Crisis (IPC Phase 3) acute food insecurity.

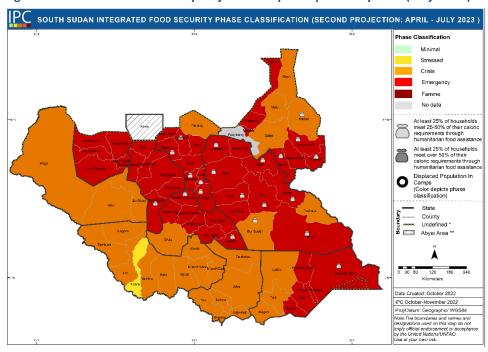
State	2022/2023 Population	Minimal	Stressed	Crisis	Emergency	Catastrophe
Central Equatoria	1,548,616	327,000	679,000	475,000	67,000	-
Eastern Equatoria	1,127,486	246,000	367,000	354,000	160,000	-
Jonglei	2,035,636	218,000	523,000	703,000	559,000	33,000
Lakes	1,212,052	226,000	360,000	499,000	127,000	-
Northern Bahr el Ghazal	936,932	123,000	281,000	349,000	184,000	-
Unity	1,125,769	101,000	261,000	513,000	251,000	-
Upper Nile	1,458,092	211,000	387,000	622,000	239,000	-
Warrap	1,296,510	240,000	310,000	413,000	333,000	-
Western Bahr el Ghazal	664,156	147,000	295,000	206,000	16,000	-
Western Equatoria	968,956	384,000	377,000	177,000	30,000	-
Total	12,374,205	2,223,000	3,840,000	4,311,000	1,966,000	33,000

Table 2: Estimation of populations for projected period: December 2022 - March 2023

Note: A population in IPC Phase 3 and above does not necessarily reflect the full population in need of urgent action. This is because some households may be in IPC Phase 2 or even in IPC Phase 1, because of the effects of humanitarian assistance. The national population is estimated at 12,477,728; however, the total analyzed, and classified population is 12,410,801 because an estimated 66,927 people living in Panyikang County in Upper Nile State were not analyzed and classified due to the County being inaccessible during the FSNMS data collection exercise.

PROJECTED IPC ACUTE FOOD INSECURITY SITUATION FOR APRIL TO JULY 2023

Figure 3: IPC Acute Food Insecurity Projection Map for April to July 2023 (Projection)



What is on the map?

47 counties are classified in Emergency (IPC Phase 4) acute food insecurity, 29 counties are classified in Crisis (IPC Phase 3) acute food insecurity, and 1 county is classified in Stressed (IPC Phase 2) acute food insecurity.

What is in the population table?

With the planned levels of HFA, 0.3% of the population (about 43,000 people) will likely be in Catastrophe (IPC Phase 5) acute food insecurity; 23.4% of the population (about 2.90 million people) will likely be in Emergency (IPC Phase 4) acute food insecurity; and 39.0% of the population (about 4.82 million people) will likely be in Crisis (IPC Phase 3) acute food insecurity.

State	2022/2023 Population	Minimal	Stressed	Crisis	Emergency	Catastrophe
Central Equatoria	1,548,616	238,000	505,000	612,000	194,000	-
Eastern Equatoria	1,127,486	216,000	333,000	365,000	213,000	-
Jonglei	2,035,636	146,000	379,000	784,000	690,000	36,000
Lakes	1,212,052	163,000	299,000	504,000	246,000	-
Northern Bahr el Ghazal	936,932	62,000	219,000	379,000	277,000	-
Unity	1,125,769	79,000	178,000	507,000	354,000	7,000
Upper Nile	1,458,092	137,000	306,000	640,000	375,000	-
Warrap	1,296,510	166,000	246,000	472,000	413,000	-
Western Bahr el Ghazal	664,156	84,000	265,000	253,000	63,000	-
Western Equatoria	968,956	239,000	350,000	306,000	74,000	-
Total	12,374,205	1,530,000	3,080,000	4,822,000	2,899,000	43,000

Table 3: Estimation of populations for projected period: April to July 2023

<u>Note</u>: A population in IPC Phase 3 and above does not necessarily reflect the full population in need of urgent action. This is because some households may be in IPC Phase 2 or even in IPC Phase 1, because of the effects of humanitarian assistance. The national population is estimated at 12,477,728; however, the total analyzed, and classified population is 12,410,801 because an estimated 66,927 people living in Panyikang County in Upper Nile State were not analyzed and classified due to the County being inaccessible during the FSNMS data collection exercise.



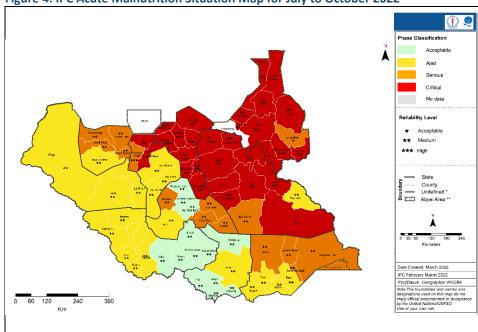
CURRENT IPC ACUTE MALNUTRITION SITUATION FOR JULY TO OCTOBER 2022

- How Severe, How Many and When Between January and December 2023, an estimated 1.4 million children under five years are expected to suffer from acute malnutrition based on analysis and estimations from the results of the SMART nutrition surveys, Food Security and Nutrition Monitoring System (FSNMS) and program admission trends. Approximately 345,893 will need SAM treatment while another 1,057,703 will need MAM treatment. Acute malnutrition burden will be highly concentrated in the four states of Jonglei, Upper Nile, Unity and Warrap in about 61% of the total burden. As for the severity of the situation, during July and October, 30 counties are classified in IPC AMN Phase 4 (Critical), 15 counties in IPC AMN Phase 3 (Serious), 19 counties in IPC AMN Phase 2 (Alert) and 13 in IPC AMN Phase 1 (Acceptable). During the post-harvest season, unlike in the past, not much improvement is expected. Instead, the situation is expected to deteriorate in 50 counties. Deterioration in 20 counties is likely to cause change in classification to a worst phase, while in another 30 counties, the situation will likely deteriorate but remain within the same IPC AMN phase. Overall, in the post-harvest period, counties in IPC AMN Phase 3 (Serious) and IPC AMN Phase 4 (Critical) will likely to increase from 45 to 56. The lean season will likely to see a further deterioration in all counties, thus increasing the number of counties in IPC AMN Phase 3 (Serious) and IPC AMN Phase 4 (Critical) to 59 counties.
- Where Between July and October 2022, 57% of the counties in crises (IPC AMN Phase 3) or worse) are from the Greater Upper Nile region (Jonglei, Upper Nile and Unity states) Jonglei State has nine counties (Akobo, Ayod, Canal/Pigi, Fangak, Pibor, Nyirol, Uror, Twic East and Duk); Upper Nile State has ten counties (Melut, Baliet, Renk, Maban, Malakal, Manyo, Fashoda, Ulang, Nasir and Maiwut); Unity State has nine counties (Abiemnhom, Leer, Mayendit, Panyijiar, Pariang, Mayom, Rubkona, Guit and Koch); and Warrap State has two counties (Gogrial East and Twic). A total of 15 Counties are classified in IPC AMN Phase 3 (Serious) i.e., four counties in Eastern Equatoria State, four counties in Northern Bahr el Ghazal State, four counties in Lakes State and one County each in Jonglei State, Warrap State and Upper Nile State. During the second projection period (lean season), the situation is expected to deteriorate further where 59 counties are projected to be in crises (IPC AMN Phase 3) or worse. This represents the highest number classified in IPC AMN Phase 4 (Critical) for the past 3 similar seasons.
- Why The major factors contributing to acute malnutrition include high prevalence of diseases. 62.5% of children reported to have been ill two weeks prior to the assessment. Diarrhea, fever, and cough were the leading symptoms reported. Existing poor sanitation conditions are likely contributing to the high incidences of illness, with open defecation reported by as high as 50% of households in 56 counties. Inadequate feeding practices of infant and young children is another major contributing factor. All Infant and Young child feeding (IYCF) indicators remain suboptimal. At national level, Minimum Acceptable Diet was 4.6%, Minimum Dietary Diversity was 18%, and Minimum Meal Frequencies was at 25%. Only 4.6% of children aged 6-23 months are receiving the required food quality at the required frequency. At state level, IYCF indicator estimates showed huge variance. Unity, Upper Nile, Jonglei and Eastern Equatoria states had a MAD of less than 5%. Overall, the MAD across states ranged from a low of 2.8% to 9.1%. Elevated levels of food insecurity (IPC AFI Phase 3 and above) in most counties also contribute to acute malnutrition. In the current analysis period of October to November 2022, an estimated 6.64 million people (53.6% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 2.22 million people are facing Emergency (IPC Phase 4) acute food insecurity, and 61,000 are facing Catastrophe (IPC Phase 5) acute food insecurity. Limited access to health is a major contributing factor, especially in locations with flooding and conflict (Jonglei, Upper Nile and Unity states) where coverage of health services remains low. There was a significant cut on the health budget that used to support provision of primary health care services. The Health Pool Fund was slashed by 24%, reducing critical health support in at least 220 facilities across the country. These multiple deprivations, coupled with conflict/insecurity that is leading to displacements and the targeting of humanitarian actors is hampering the delivery of live saving programmes and is expected to lead into further deterioration if urgent and adequate support is not provided on time.



CURRENT IPC ACUTE MALNUTRITION SITUATION FOR JULY TO OCTOBER 2022

Figure 4: IPC Acute Malnutrition Situation Map for July to October 2022



What is on the map?

According to the IPC AMN, a total 45 counties are classified in IPC AMN Phase 3 (Serious) and above. 15 counties are classified in IPC AMN Phase 3 (Serious) and 30 counties are classified in IPC AMN Phase 4 (Critical).

28 out of 30 counties classified in IPC AMN Phase 4 (Critical) are from Greater Upper Nile region. Jonglei State has nine counties in IPC AMN Phase 4 (Critical) (Akobo, Ayod, Canal/Pigi, Fangak, Pibor, Nyirol, Duk, Uror and Twic East); Upper Nile State has eleven counties (Baliet, Fashoda, Maban, Malakal, Manyo, Melut, Ulang, Renk, Nasir and Maiwut); Unity State has nine counties (Abiemnhom, Koch, Guit, Rubkona, Mayom, Leer, Mayendit, Panyijiar, and Pariang). Warrap State has two counties (Twic and Gogrial East).

15 counties are classified in IPC AMN Phase 3 (Serious); four counties are in Eastern Equatoria State, four counties are in Lakes State, four counties are in Northern Bahr el Ghazal State, and one county each from Jonglei, upper Nile and Warrap states.

13 counties are classified in IPC AMN Phase 1 (Acceptable). Five are from Central Equatoria State, five are form Western Equatoria State, and three are from Lakes State.



TOTAL NUMBER OF CHILDREN AFFECTED BY ACUTE MALNUTRITION AND ARE IN NEED OF TREATMENT

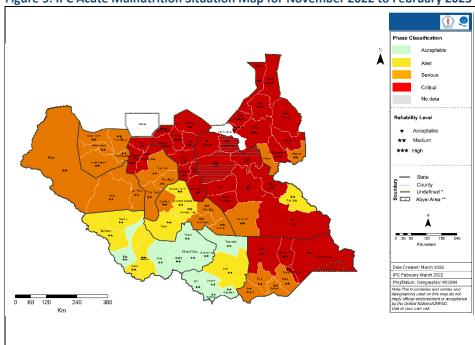
STATE	Population 6-59 months	SAM Burden	MAM Burden	Total Burden	% of GAM Burden
Central Equatoria	294,237	27,087	79,280	106,367	8%
Eastern Equatoria	214,222	30,330	77,707	108,037	8%
Jonglei	386,771	78,282	234,702	312,984	22%
Lakes	230,290	24,383	77,494	101,877	7%
N Bahr el Ghazal	178,017	27,149	92,732	119,881	9%
Unity	213,896	50,283	151,154	201,437	14%
Upper Nile	289,778	40,811	162,955	203,766	15%
Warrap	246,337	35,018	100,196	135,214	10%
Western Bahr el Ghazal	126,190	17,251	36,803	54,054	4%
Western Equatoria	184,102	15,299	44,680	59,979	4%
TOTAL	2,363,840	345,893	1,057,703	1,403,596	100%

Table 4: Summary of SAM, MAM, and GAM caseloads between January and December 2023



PROJECTED IPC ACUTE MALNUTRITION SITUATION FOR NOVEMBER 2022 TO FEBRUARY 2023

Figure 5: IPC Acute Malnutrition Situation Map for November 2022 to February 2023



What is on the map?

During the first projection period, seasonal deterioration of acute malnutrition situation is expected. During the post-harvest season, unlike in the past, not much improvement is expected. Instead, the situation is expected to deteriorate. In 20 counties, the deterioration will lead to change in phase classification to a worse phase.

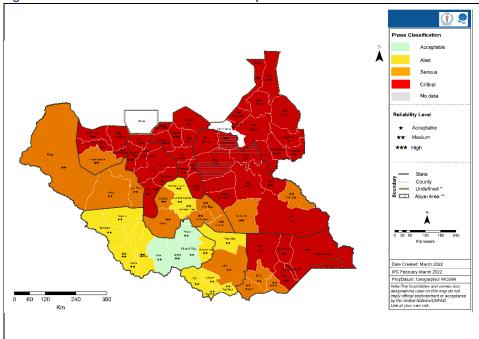
56 counties are projected to be in IPC AMN Phase 3 (Serious) and phase 4 (critical), with 22 Counties in IPC AMN Phase 3 (Serious) and 34 Counties in IPC AMN Phase 4 (Critical). About 80 percent of Counties classified in IPC AMN Phase 4 (Critical) are in Greater Upper Nile region, remaining 20% in Eastern Equatoria and Warrap. 22 Counties are classified in IPC AMN Phase 3 (Serious), 68% of them are in Greater Bahr el Ghazal region.

A total of 10 counties currently classified as IPC AMN Phase 3 (Serious) are projected to be deteriorate into a worse phase of IPC AMN Phase 4 (Critical) in the second projection period (lean season), increasing the proportion of counties in IPC AMN Phase 4 (Critical) by 28%.



PROJECTED IPC ACUTE MALNUTRITION SITUATION FOR MARCH TO JUNE 2023

Figure 6: IPC Acute Malnutrition Situation Map for March to June 2023



What is on the map?

During the second projection period, there is expected further deterioration of acute malnutrition. The Projection period falls under lean season which is also a season of high acute malnutrition. This season is characterized by limited food availability at Household level affecting individual intake. Increased rains during the season will likely lead to increase in illness among children, contributing to the expected deterioration.

59 counties out of 77 analyzed counties are projected to be in IPC AMN Phase 3 (Serious) and above. 44 counties are projected to be in IPC AMN Phase 4 (Critical) while 15 counties in IPC AMN Phase 3 (Serious).

Compared to the first projection, the number of counties in IPC AMN Phase 3 (Serious) and above will increase from 56 to 59. This projection period is estimated to record a noteworthy increase in counties classified as IPC AMN Phase 4 (Critical), increasing from 34 to 44 representing a 29% increase in IPC AMN Phase 4 (Critical) counties.

3 states of Upper Nile, Jonglei and Unity contribute 66% of total counties classified in IPC AMN Phase 4 (Critical). 3 states of Eastern Equatoria, Lakes and Western Bahr el Ghazal have 73% of the counties classified as IPC AMN Phase 3 (Serious).

All Western Equatoria counties are projected to be either in IPC AMN Phase 1 (Acceptable) or IPC AMN Phase 2 (Alert) during the projection period.

ACUTE FOOD INSECURITY SITUATION OVERVIEW AND KEY DRIVERS



OCTOBER 2022 TO JULY 2023 SITUATION OVERVIEW

GREATER UPPER NILE REGION

In the Greater Upper Nile region, the food security situation remains critical across all the analysis periods, with a similar number of people facing acute food insecurity as in the 2021-2022 period. In **October and November 2022**, an estimated 3 million people (65% of the population in Greater Upper Nile region) are facing Crisis - IPC Phase 3 - or worse acute food insecurity. This represents 45% of the total population facing acute food insecurity in South Sudan. An estimated 61,000 people in Jonglei (Akobo, Canal Pigi, Fangak and Pibor) are expected to face Catastrophe (IPC phase 5) levels of acute food insecurity.

These severe outcomes are driven by the ongoing subnational conflict along the River Nile, resulting in displacement of more than 30,000 persons, widespread loss of assets, disruption to livelihoods, and the destruction and looting of civilian property, markets, and humanitarian facilities and assets, and limited access and provision of adequate and timely humanitarian assistance. Additionally, heavy rains in the Ethiopian Highlands are leading to flooding along the marshland areas in the Sobat basin of Upper Nile and along eastern Jonglei. This situation has been exacerbated by drier than average conditions and severe rainfall deficits in parts of Jonglei and Unity which has negatively impacted agricultural production resulting in high humanitarian needs. Markets closer to the conflict affected areas (Malakal, Old Fangak) have been disrupted, and unusually high food prices have been recorded, leaving market dependent households unable to meet their food needs, considering their exclosured to the conflict affected areas (Malakal, Old Fangak) have been disrupted.

The worst affected State is Jonglei where 68% of the population is in Crisis (IPC Phase 3) or worse acute food insecurity, followed by Unity (66.7%) and Upper Nile (58.5%).

In the first projection period of **December 2022 to March 2023**, an estimated 2.92 million people (63% of the population in Greater Upper Nile region) will likely face Crisis (IPC Phase 3) or worse acute food insecurity, marking a slight improvement compared to first quarter of 2022 – mainly driven by the availability of wild foods, fishing and hunting. A total of 33,000 people in Jonglei (Akobo, Fangak and Pibor) will likely face Catastrophe (IPC phase 5) levels of acute food insecurity. Though this season represents a favorable post-harvest period, crop production in this area has been negatively affected by the fourth consecutive year of flooding and sub-national conflict which has restricted movements for livelihood activities. As a result, own crop production is expected to be meagre. Moreover, ongoing subnational conflict and large areas still submerged in water will likely pose access constraints on the delivery of humanitarian assistance. Overall, 19 out of the 31 classified counties are expected to experience Emergency (IPC Phase 4) acute food insecurity, while the remaining 12 counties are expected to be in Crisis (IPC Phase 3) acute food insecurity classification.

In the second projection period of April to July 2023, the food security situation will deteriorate, and the number of people in Crisis (IPC Phase 3) or worse acute food insecurity will likely rise to 3.4 million (73.4% of the population in Greater Upper Nile region). A total of 43,000 people in Jonglei (Akobo, Canal Pigi and Fangak) and Unity (Leer and Mayendit) will likely face Catastrophe (IPC phase 5) levels of acute food insecurity. This severe situation is driven by the likely continuation of the ongoing conflict in Upper Nile and Northern Jonglei, which is expected to further disrupt livelihood activities, trade flows, market functioning and the provision of humanitarian assistance and basic services. Moreover, large cereal deficits, seasonal rise in staple food prices due to low local market supply linked to poor feeder road conditions and inaccessibility to markets during rainy season, limited income-earning opportunities given the erosion of livelihood assets, and persistent macro-economic challenges are likely to impact household food availability and access, and the overall food security situation. Unity State is likely to be the worst affected with 77.2% of its population likely be in Crisis (IPC Phase 3) or worse acute food insecurity, followed by Jonglei (74.2%) and Upper Nile (69.6%).

JONGLEI STATE AND PIBOR ADMINISTRATIVE AREA

In **October and November 2022**, an estimated 1.39 million people (68% of the population) face Crisis (IPC Phase 3) or worse acute food insecurity, of which 718,000 people are in Crisis (IPC Phase 3) acute food insecurity, 606,000 people are in Emergency (IPC Phase 4) acute food insecurity, and 61,000 people are in Catastrophe (IPC Phase 5) acute food insecurity in Akobo, Canal/Pigi, Fangak and Pibor Administrative Area. The ongoing subnational conflict along the River Nile has resulted in large-scale displacements into Fangak and Canal Pigi, and has caused disruptions to food access. Insecurity has continued to hamper movement of goods into Fangak, resulting in scarcity of basic goods and consequently high price levels. Additionally, climate-

related shocks (heavy rains in the Ethiopian Highlands leading to flooding along eastern Jonglei, and drier than average conditions and severe rainfall deficits in the southwestern part of Jonglei) negatively impacted livelihoods and agricultural production. Overall, 8 out of the 11 counties are expected to experience Emergency (IPC Phase 4) acute food insecurity, while the remaining 3 counties are expected to be in Crisis (IPC Phase 3) acute food insecurity classification. Akobo and Fangak are of greatest concern, as 85% and 80% of their total population respectively is expected to face Crisis (IPC Phase 3) or worse acute food insecurity. During this period, 10% of the population in Akobo, and 5% each in Canal/Pigi and Fangak are facing Catastrophe (IPC Phase 5) acute food insecurity.

In the first projection period of **December 2022 to March 2023**, an estimated 1.3 million people (64% of the population) are likely to face Crisis (IPC Phase 3) or worse acute food insecurity, of which 704,000 people are likely to be in Crisis (IPC Phase 3) acute food insecurity, 560,000 people are likely to be in Emergency (IPC Phase 4) acute food insecurity, and 32,000 people are likely to be in Catastrophe (IPC Phase 5) acute food insecurity in Akobo, Fangak and Pibor Administrative Area. Clashes along the River Nile are likely to continue and further extend along the White Nile, with violence also spilling over into Fangak and Canal/Pigi counties in Jonglei, resulting in further civilian displacement, destruction of properties, and access impediments to humanitarian actors. Additionally, prevailing food insecurity is driven by the effects of significant underlying vulnerabilities that have built up over time due to the protracted conflict and recurrent shocks. The eight counties of Akobo, Ayod, Canal/Pigi, Fangak, Nyirol, Pibor, Twic East and Uror are likely to face Emergency (IPC Phase 4) acute food insecurity, whereas Bor South, Duk and Pochalla counties are likely to be in Crisis (IPC Phase 3) acute food insecurity.

In 2022, Jonglei experienced compounded shocks across most of the counties, including continued endemic conflict that resulted in the loss of life and assets, displacement, disruption and destruction of livelihoods; a third consecutive year of unprecedented and atypical floods that submerged human settlements, farmlands and pasturelands, displacing people while also restricting mobility, as well as disrupted markets and delivery of humanitarian assistance to the flood-affected populations; the continuing economic decline and inflation linked to the depreciation of the South Sudanese Pound led to high food prices, lack of investment in productive infrastructure and assets, limited livelihood opportunities outside of farming or livestock herding; poor WASH conditions, especially contaminated waters and high disease incidences continue to chronically affect the state especially in the rainy season.

Intensified sub-national violence has continued to result in the loss of life, destruction of property, population displacement, deliberate disruption of livelihoods, the loss of livestock, and has restricted access to food sources.

In the second projection period between **April 2023 and July 2023**, an estimated 1.51 million people (74.2% of the population) are likely to be in Crisis (IPC Phase 3) or worse acute food insecurity, of which 784,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity, 690,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, and 36,000 people will likely be in Catastrophe (IPC Phase 5) acute food insecurity in Akobo, Fangak, and Canal/Pigi. During this period, the entire State will be facing Emergency (IPC Phase 4) acute food insecurity, except for Bor South and Pochalla Counties that will be facing Crisis (IPC Phase 3) acute food insecurity. In all counties, the food security situation is expected to worsen as compared to the December 2022 – March 2023 period, with eight counties having at least 75% of their population facing Crisis (IPC Phase 3) or worse acute food insecurity. The lean season needs to be closely monitored, especially in counties with a high proportion of their population in Crisis (IPC Phase 3) or worse acute food insecurity. Most households will have depleted their cereal stocks and wild foods and fishing (only for households with equipment and access to water bodies) are expected to be some of the most important food sources that households will rely on during the projection period which is likely to be characterized by limited movement as floodwaters increase. Access to livestock and associated products will also remain atypically low due to animal losses and morbidities. Given the severity of outcomes and the vulnerability of the local populations to new shocks, Akobo, Fangak and Canal/Pigi will remain among the areas of highest concern.

UPPER NILE STATE

In **October and November 2022**, an estimated 853,000 people (58.5% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 601,000 people are in Crisis (IPC Phase 3) acute food insecurity and 252,000 people are in Emergency (IPC Phase 4) acute food insecurity. The ongoing conflict along the Upper Nile-Jonglei border has resulted in an increasing number of armed attacks, causing large-scale displacement and disruptions to food access, and has impacted negatively on the main season crop production, livelihood activities, and market and trade flows. The level of food prices has risen, resulting in an increase of 51% in the cost of food basket in Malakal, from February to October 2022. River transportation

between Renk and Malakal has been occasionally suspended due to insecurity. Heavy rains in the Ethiopian Highlands and the recovery in rainfall in South Sudan since July 2022 led to a re-start of the flood season and contributed to the flooding in Upper Nile. As a result, large areas in southern and central Upper Nile along marshland areas in the Sobat basin are also newly flooded with much larger extents than last year. In particular, flooding near Melut has increased significantly, as compared to the recent past. Overall, 7 out of the 11 classified counties are in Emergency (IPC 4) acute food insecurity classification, while the remaining 4 counties are in Crisis (IPC Phase 3) acute food insecurity classification. Malakal and Nassir are of greatest concern, as 65% of their total population is expected to face Crisis (IPC Phase 3) or worse acute food insecurity.

In the first projection period of **December 2022 to March 2023**, the post-harvest period in the State, 861,000 people (59% of the population) is likely to face Crisis (IPC Phase 3) or worse acute food insecurity, of which 601,000 people are likely to be in Crisis (IPC Phase 3) acute food insecurity, and 252,000 people are likely to be in Emergency (IPC Phase 4) acute food insecurity. This slight deterioration of the overall food security, seasonally unusual, is driven by the assumption that clashes in the State are likely to further increase after the end of the rainy season. This is likely to cause further civilian displacement, destruction of properties, and hamper humanitarian access. Given the high river levels and the wetter conditions in the Lake Victoria catchment, the newly flooded areas in the State are expected to remain so during this period and the overall extent of flood/wetland is most likely to increase further. The prevailing wetter than usual conditions are expected to increase the incidence of livestock disease, in turn limiting the availability of and access to livestock products. Household's ability to move around in search of natural food sources and for other traditional livelihoods is likely to be hampered in flooded areas. Prevailing insecurity and deteriorate rood conditions, as a result of extended wet areas, are likely to determine high food prices, which, coupled with scarce income opportunities and low incomes, may significantly reduce households' purchasing power, leading to reduced/limited access to foods.

In the second projection period, between **April and July 2023**, which also overlaps with the peak of the lean season in July, the food security situation will further deteriorate with an estimated 1.02 million people (69.6% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity, of which 640,000 people will be in Crisis (IPC Phase 3) acute food insecurity, and 375,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity. During this period, all of the classified counties in Upper Nile State will likely be in Emergency (IPC Phase 4) acute food insecurity, except for Maban, Melut and Renk counties which are classified in Crisis (IPC Phase 3) acute food insecurity. Seasonally, high levels of food insecurity are driven by the depletion of cereal stocks at household level during this period, a rise in staple food prices due to low local market supply linked to poor feeder road conditions and inaccessibility to markets during rainy season; limited income-earning opportunities given the erosion of livelihood assets; and the persistent macro-economic challenges in the country. The extensive flooding experienced in the State is also likely to aggravate the severity of food insecurity during this projection period.

Factors to monitor through the projected period include conflict and insecurity, and its impact on livelihoods and the provision of basic services and humanitarian food assistance; food prices; disease outbreaks; and the rainy season performance and associated risks of flooding.

UNITY STATE AND RUWENG ADMINISTRATIVE AREA

In October and November 2022, an estimated 751,000 people (66.7% of the population) face Crisis (IPC Phase 3) or worse acute food insecurity, of which 480,000 people are in Crisis (IPC Phase 3) acute food insecurity and 271,000 people are in Emergency (IPC Phase 4) acute food insecurity. From a climatic perspective, the State experienced drier than average conditions until mid-July along its western borders, leading to significant delays (up to six weeks) in the onset of favorable conditions for planting and early crop development. In Central Unity, flooding has disrupted household planting and crop production. The situation in Central Unity has been further exacerbated by sub-national conflict, which has impeded most households to access fields. Access to inputs has also been disrupted, impacting negatively on agricultural production. Moreover, insecurity had hampered the provision of humanitarian assistance since May 2022 in Mayom, as physical access to the area has been challenging. In Rubkona, a section of dykes was breached, causing disruptions in movement to Rubkona town, to the airstrip and humanitarian aid delivery, and to trade flows and market functionality. This is also likely to lead to a high prevalence of water-borne diseases in the area. Overall, 6 out of the 9 counties in the State are classified in Emergency (IPC Phase 4) acute food insecurity, while the remaining 3 counties are classified in Crisis (IPC Phase 3) acute food insecurity. Leer, Mayendit and Rubkona are of greatest concern, as over 75% of their total population is facing Crisis (IPC phase 3) or worse acute food insecurity.

In the first projection period of **December 2022 to March 2023**, the post-harvest period in the State, 764,000 people (67.9% of the population) are likely to face Crisis (IPC Phase 3) or worse acute food insecurity, of which 513,000 people are likely to be in Crisis (IPC Phase 3) acute food insecurity, and 251,000 people are likely to be in Emergency (IPC Phase 4) acute food insecurity. Insecurity is likely to persist in norther Unity, threatening lives and livelihoods, interfering with market functionality and trade flows, and likely to disrupt the provision of basic services and humanitarian food assistance. Flooding has resulted in livestock losses, impacting negatively on the availability of and access to livestock products and incomes remain low for livestock owning households. Limited trade flows and significant disruptions to markets by floods and conflict are likely to result in unusually high staple food prices, thus limiting food access for majority of households in the State. Given the long-lasting impacts of flooding on crops, and livestock as well as trade flows and assistance delivery, Leer, Mayendit and Rubkona will remain areas of extreme concern, with 80% of their total population expected to face Crisis (IPC phase 3) or worse acute food insecurity.

In the second projection period of April to July 2023, which overlaps with the peak of the lean season, the food security situation will significantly deteriorate with an estimated 868,000 people (77.2% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity, of which 507,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity, 354,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity and 7,000 people will likely be in Catastrophe (IPC Phase 5) acute food insecurity in Leer and Mayendit. Severe food security outcomes are driven by diminished coping capacities, increasing cereal gap, food stocks depletion, disruptions of market functionality that are occasioned by infrastructure deterioration during the rainy season, high food prices in the face of low purchasing power, and challenges in the delivery of humanitarian assistance which will likely be caused localized insecurity and impassable roads. Since households' cereal yields are likely to be generally lower than the 2021 harvest, food shortages are expected, and will likely be more severe than last year's. During this time, most of the wild foods usually consumed are likely to be exhausted. These factors will determine significant food consumption gaps to be experienced by the most vulnerable households. Overall, all counties are classified in Emergency (IPC Phase 4) acute food insecurity, except for the northern counties of Abiemnhom and Pariang, which are classified in Crisis (IPC Phase 3) acute food insecurity. Leer and Mayendit and Rubkona are of greatest concern, as 90% of their total population is expected to face Crisis (IPC phase 3) or worse acute food insecurity. Moreover, the food security is also a matter of high concern in Rubkona and Panyijar county, where 85% and 80% respectively of the total population is likely to experience Crisis (IPC phase 3) or worse acute food insecurity.

Factors to monitor through the projected period include subnational violence and localized conflict, cattle raiding, market price trends, and the rainy season performance and associated risks of flooding.

GREATER EQUATORIA REGION

In the Greater Equatoria Region, an estimated 1.36 million people (38% of the region's population) are classified in Crisis (IPC Phase 3) or worse acute food insecurity between **October and November 2022**; of these, 309,000 people are in Emergency (IPC Phase 4) acute food insecurity and 1 million people are in Crisis (IPC Phase 3) acute food insecurity. During this period, 1 county is classified in Emergency (IPC Phase 4) acute food insecurity, 21 counties are classified in Crisis (IPC Phase 3) acute food insecurity, 1 county is classified in Stressed (IPC Phase 2) acute food insecurity, and 1 county is classified in Minimal (IPC Phase 1) acute food insecurity. Food insecurity in the Greater Equatoria Region is mainly driven by climatic shocks (floods and dry spells); insecurity incidents and associated displacements and access/movement restrictions; low agriculture production; and high food prices. The worst affected State is Eastern Equatoria with 42.2% of its population facing Crisis (IPC Phase 3) or worse acute food insecurity, followed by Central Equatoria State (39.6%) and Western Equatoria State (28.8%)

During the post-harvest period of **December 2022 to March 2023**, the food security situation will slightly improve with an estimated 1.26 million people (35% of the region's population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 257,000 people will be in Emergency (IPC Phase 4) acute food insecurity, and 1 million will be in Crisis (IPC Phase 3) acute food insecurity. During this period, 2 counties will likely be in Emergency (IPC Phase 4) acute food insecurity classification, 17 counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification, 4 counties will likely be in Stressed (IPC Phase 2) acute food insecurity classification, and 1 County will likely be in Minimal (IPC Phase 1) acute food insecurity classification. The improvement will mainly be driven by increased agricultural production in some counties and improvement in physical access across the region; however conflict/insecurity which is expected to continue in some parts of the region, high food prices and the expected influx of refugee returnees will remain as the main drivers of food insecurity. The worst affected State is

Eastern Equatoria with (46%) of its population facing Crisis (IPC Phase 3) or worse acute food insecurity, followed by Central Equatoria State (35%) and Western Equatoria State (21%).

From April to July 2023, the food security will deteriorate with an estimated 1.76 million people (48% of the region's population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. Of these 481,000 people will be in Emergency (IPC Phase 4) acute food insecurity and 1.28 million people will be in Crisis (IPC Phase 3) acute food insecurity. During this period, 4 counties will likely be in Emergency (IPC Phase 4) acute food insecurity classification, 18 counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification, and 1 County will likely be in Stressed (IPC Phase 2) acute food insecurity classification. The key drivers of food insecurity are the increased dependency on markets following the depletion of household harvests; high food prices; insecurity which is expected to continue in parts of the region, and the stresses associated with the degradation of infrastructure (roads, bridges etc.) during the rainy season. However, vegetables and some green harvests will become available later in the projection period once the rains establish, and access to livestock products is also expected to improve in the semi-arid pastoral areas of Eastern Equatoria when livestock return following the start of the rainy season. During this period, the worst affected State will be Central Equatoria where 52% of its population is likely to face Crisis (IPC Phase 3) or worse acute food insecurity, followed by Eastern Equatoria (51.3%) and Western Equatoria (39.2%).

CENTRAL EQUATORIA STATE

In Central Equatoria State, an estimated 614,000 people (39.6% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity between **October and November 2022**, of which 104,000 are in Emergency (IPC Phase 4) acute food insecurity and 510,000 are in Crisis (IPC Phase 3) acute food insecurity. During this period, all the counties are classified in Crisis (IPC Phase 3) acute food insecurity. Food insecurity during this period is driven by low crop production, insecurity/inter-communal conflicts particularly between cattle keepers and farmers that have led to displacement and movement restrictions, crop and livestock pests and diseases, and high food prices. A key mitigating factor during this period is the availability of some harvests at the household level.

In the post-harvest period from **December 2022 to March 2023**, a slight seasonal improvement in the food security situation is expected with an estimated 542,000 people (35.0% of the population) in Crisis (IPC Phase 3) or worse acute food insecurity, of which 67,000 will likely be in Emergency (IPC Phase 4) acute food insecurity, and 475,000 will likely be in Crisis (IPC Phase 3) acute food insecurity. During this period all counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification. The slight improvement in the food security situation will mainly be driven by the availability of agricultural produces and seasonal improvement of access which will increase wild food gathering and trade. Insecurity is likely to pick up and prices of food commodities will remain relatively high.

From **April to July 2023**, a seasonal deterioration in the food security situation is expected with an estimated 806,000 people (52.0% of the population) in Crisis (IPC Phase 3) or worse acute insecurity, of which 194,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, and 612,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity. During this period, all counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification. The deterioration is mainly driven by typical lean season factors such as depletion of food stocks, high food prices, degraded road conditions that affect market access and functionality, and likelihood of insecurity (in some counties such as Juba, Kajo Keji, Morobo, Terekeka and Yei). However, some mitigating factors include availability of green harvests, fish, and livestock products, most of which are expected to increasingly become seasonally available with the onset of the rainy season.

EASTERN EQUATORIA STATE

In **October to November 2022**, an estimated 476,000 (42.2% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 143, 000 people are in Emergency (IPC Phase 4) acute food insecurity, and 333,000 people are in Crisis (IPC Phase 3) acute food insecurity. During this period, Budi, Ikotos, Kapoeta North, Kapoeta South, Lafon, Magwi and Torit counties are classified in Crisis (IPC Phase 3) acute food insecurity, and Kapoeta East is classified in Emergency (IPC Phase 4) acute food insecurity. Food insecurity is mainly driven by climatic shocks (prolonged dry spells) which induced atypical long-distance livestock migration in search of water and pastures and affected crop production, high food prices, insecurity, and high levels of crop pests and diseases.

During the post-harvest period of **December 2022 to March 2023**, a slight deterioration in the food security situation is expected with an estimated 514,000 people (45.6% of the population) in Crisis (IPC Phase 3) or worse acute food insecurity, of which

160,000 are in Emergency (IPC Phase 4) acute food insecurity and 354,000 are in Crisis (IPC Phase 3) acute food insecurity. During this period all counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification, except Kapoeta East and Kapoeta North counties which will likely be in Emergency (IPC Phase 4) acute food insecurity classification. The food insecurity drivers are likely to be conflict and insecurity, drought or prolonged dry spells that affected both livestock and crop production and high food prices. However, access will improve across the State and this will boost trade.

From April to July 2023, the food security situation will remain dire with an estimated 578,000 people (51.3% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity, of which 213,000 people are likely to be in Emergency (IPC Phase 4) acute food insecurity, and 365,000 people are likely to be in Crisis (IPC Phase 3) acute food insecurity. During this period, Lafon, Torit and Magwi counties are likely to be in Crisis (IPC Phase 3) acute food insecurity classification, whereas Kapoeta East, Kapoeta North, Kapoeta South, Budi and Ikotos counties are likely to be in Emergency (IPC Phase 4) acute food insecurity classification. Food insecurity will mainly be driven by low or no food stocks, high food prices, poor market functionality because of the degradation of roads during the rainy season, insecurity that will likely result in displacement and affect agricultural activity, and the seasonal increase in the prevalence of livestock pests and diseases that will affect livestock production and productivity. A mitigating factor will be the return of livestock nearer homesteads around April/May following the arrival of the rainy season, and the increased access to wild foods.

WESTERN EQUATORIA STATE

In **October to November 2022**, an estimated 279,000 people (28.8% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 62,000 people are in Emergency (IPC Phase 4) acute food insecurity, and 217,000 people are in Crisis (IPC Phase 3) acute food insecurity. During this period, Ezo, Ibba, Maridi, Mundri East, Mundri West, Mvolo, Nagero and Tambura are classified in Crisis (IPC Phase 3) acute food insecurity, Yambio County is classified in Stressed (IPC Phase 2) acute food insecurity, and Nzara County is classified in Minimal (IPC Phase 1) acute food insecurity. The key drivers of food insecurity are climate shocks (floods and dry spells), trade flow disruptions, high food prices, and low crop production in Mundri East, Mundri West, Mvolo and Nagero counties.

During the post-harvest period of **December 2022 to March 2023**, a slight improvement in the food security situation is expected with an estimated 207,000 people (21.4% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity, of which 30,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, and 177,000 people will likely in Crisis (IPC Phase 3) acute food insecurity. During this period, Mundri East, Mundri West, Nagero, Mvolo and Tambura will likely be Crisis (IPC Phase 3) acute food insecurity classification, Ezo, Ibba, Maridi, and Yambio will likely be in Stressed (IPC Phase 2) acute food insecurity classification, and Nzara County will likely be in Minimal (IPC Phase 1) acute food insecurity classification. The key drivers of food insecurity are conflict and insecurity, drought or prolonged dry spells that affected both livestock and crop production and high food prices. However, increased in production in Yambio, Nzara, Ibba, Tambura and Ezo counties will improve the food security situation, and improved physical access across the state which will boost trade.

During the lean season period of **April to July 2023**, the food security situation deteriorates with an estimated 380,000 people (39.2% of the population) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 74,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, and 306,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity. During this period, all counties will likely be in Crisis (IPC Phase 3) acute food insecurity classification, except Nzara which will likely be in Stressed (IPC Phase 2) acute food insecurity classification. The key drivers of food insecurity will be the seasonal increase in food prices following depletion of food stocks for the cereal deficit counties and the resultant increased dependency on markets. The onset of the rainy season will also lead to the increased availability of wild foods and green harvests in June/July 2023.

GREATER BAHR EL GHAZAL REGION

In **Greater Bahr el Ghazal** region (GBEG), an estimated 2.28 million people (55.4% of the population in the region) experienced Crisis (IPC Phase 3) or worse acute food insecurity between **October and November 2022**. The key drivers of food insecurity in the region were unusually high food prices, reduced income, dry spells, floods, and incidents of conflict and insecurity among others. Northern Bahr el Ghazal State is the worst affected by the shocks with 61.9% of its population in Crisis (IPC Phase 3) or worse food insecurity followed by Warrap (57.1%), Lakes (56.9%) and Western Bahr el Ghazal (40.2%).

In the post-harvest projection period of **December 2022 to March 2023**, the situation will seasonally improve with an estimated 2.13 million people (51.8% of the total population in the region) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. This improvement is attributed to the availability of harvests, increased market functionality, stabilization of market prices, and increased income availability from the sale of cash crops. The state with the highest number of people facing Crisis (IPC Phase 3) or worse acute food insecurity will be Warrap State (57.6%), followed by Northern Bahr el Ghazal State (56.9%), Lakes State (51.7%), and Western Bahr el Ghazal State (33.4%).

During the lean season projection period of **April to July 2023**, the situation will seasonally deteriorate with an estimated 2.61 million people (63.4% of the total population in the region) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. The most affected state will be Northern Bahr el Ghazal where 70.0% of the population will likely face Crisis (IPC Phase 3) or worse acute food insecurity, followed by Warrap State (68.2%), Lakes State (61.9%), and Western Bahr el Ghazal State (47.5%). This deterioration is because of the depletion of food stocks, challenges in physically accessing and resupplying markets because rainfall-induced deterioration of road conditions, increased market prices, and the likelihood of intercommunal conflicts, including cattle raiding. This period requires close monitoring of the situations as there could also be aggravating factors related to water borne diseases and flooding as the period falls within the rainy season.

WESTERN BAHR EL GHAZAL STATE

In the current analysis period of **October and November 2022**, an estimated 267,000 people (40.2% of the State population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 218,000 people are in Crisis (IPC Phase 3) acute food insecurity, and 49,000 people are in Emergency (IPC Phase 4) acute food insecurity. During this period, all the counties are in Crisis (IPC Phase 3) acute food insecurity.

The food insecurity is attributed to the poor macroeconomic environment that has led to the local currency's depreciation and resultant high food prices, particularly for those households who are highly dependent on markets for food purchases; reduced household incomes that have reduced household purchasing power. Other shocks include human diseases, raiding and looting of households' assets, crop pests and diseases, and reduced income due to loss of employment and other income opportunities. However, during this period, the seasonal harvests are available to most households through their own production and the markets. Currently, households also have access to fish and wild foods, including hunting. The improved security situation has also resulted in a resumption of normal livelihoods for the poor households, including fishing, hunting, and collection of wild foods such as honey. Households are also able to access natural resources such as firewood and building poles for sale.

During the post-harvest period of **December 2022 to March 2023**, the food security situation is expected to slightly improve, with 222,000 people (33.4% of the State population) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 16,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, and 206,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity. The improvement is because of availability of harvested crops, better market functionality, and reduced prices of locally produced food commodities. Households will also have increased income from the sale of their own agricultural produce and from other livelihood activities such as harvesting honey, hunting, and fishing. The existing food insecurity is driven by a number of factors, including the presence of IPD returnees in Wau and Raja counties, the depreciation of the currency that affects the purchasing power of market-dependent households, and the insecurity posed by cattle movement from Warrap State to Jur River County that is likely to cause conflict and displacement.

The food security situation is expected to deteriorate in the lean season period of **April to July 2023** with an estimated 316,000 people (47.5% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. During this period, 253,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity, and 63,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity, with all counties classified in Crisis (IPC Phase 3) acute food insecurity. The deterioration is because of the depletion of harvested food stocks; seasonally high food prices reduced households' purchasing power because of the depreciating local currency; reduced market supplies as access routes from Sudan through Raja will deteriorate during the rainy season; increased conflict between farmers in Jur River and cattle keepers as livestock encroach into farmlands; increased pests and diseases; and a likelihood of higher numbers of IDP returnees. The reduced commodity flows through Amiet on the Sudan-South Sudan border are also likely to limit availability of commodities and result in the increase of food prices in Wau markets. The start of the rainy season is expected to support farming activities, and improve availability of wild foods, as well as pastures

and water for livestock. Availability of agricultural labour opportunities will provide some income for poorer households to access food, further mitigating the effects of the lean season.

WARRAP STATE

In **October to November 2022**, an estimated 740,000 people (57.1% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 413,000 people are in Crisis (IPC Phase 3) acute food insecurity and 327,000 people are in Emergency (IPC Phase 4) acute food insecurity. During this period, all counties are classified in Emergency (IPC Phase 4) acute food insecurity. The main drivers of food insecurity in Warrap State are conflict and insecurity, climatic shocks in the form of floods and dry spells, high food prices, animal disease outbreaks, crop pests and diseases, and reduced income at household level.

During the post-harvest period of **December 2022 to March 2023**, the food security situation is expected to deteriorate slightly, with an estimated 746,000 people (57.6% of the population) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 413,000 people will likely be in Crisis (IPC Phase 3) and 333,000 people will likely be in Emergency (IPC Phase 4). During this period, all counties are classified in Emergency (IPC Phase 4) acute food insecurity. The negative effects of the insecurity in the Amiet/Abyei region drive the slight deterioration of the food security situation during the post-harvest season, coupled with an anticipated earlier than normal depletion of harvests, continued high food prices, and reduced market functionality because of insecurity.

The food security situation is expected to deteriorate further during the lean season from **April to July 2023**, with an estimated 885,000 people (68.2% of the population) expected to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 472,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity, and 413,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity. During this period, all counties are classified in Emergency (IPC Phase 4) acute food insecurity. The deterioration of the food security situation is attributed to the seasonal depletion of food stocks, likelihood of continued high food prices, reduced market functionality and access challenges caused by insecurity and the worsening of road conditions due to rainfall, and disruption of livelihoods and displacement caused by insecurity. The rains are expected to start seasonally in April/May and this will likely improve the seasonal availability of wild foods, as well as water and pastures for livestock, thus improving the availability of milk and other livestock products – all of which will mitigate the lean season effects.

LAKES STATE

In **October to November 2022**, an estimated 690,000 people (56.9% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 517,000 people are in Crisis (IPC Phase 3) acute food insecurity, and 173,000 people are in Emergency (IPC Phase 4) acute food insecurity. During this period, all counties are classified in Crisis (IPC Phase 3) acute food insecurity. The key drivers of food insecurity are the combined effects of reduced incomes in the face of high food prices, crop pests and diseases, and the impacts of floods and dry spells on the agricultural season.

In the post-harvest season of **December 2022 to March 2023**, the food security situation in Lakes State is expected to improve, with an estimated 626,000 people (51.7% of the population) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 499,000 people will be in Crisis (IPC Phase 3) acute food insecurity, while 127,000 people will be in Emergency (IPC Phase 4) acute food insecurity. All counties will be classified in Crisis (IPC Phase 3) acute food insecurity. The improvements in the food security situation is because of the effects of crop harvests, lower food prices in the markets, improved physical access that will support engagement in diverse livelihoods such as selling of natural resources for income, as well as hunting.

During the lean season of **April to July 2023**, the food security situation is expected to seasonally deteriorate, with an estimated 750,000 people (61.9% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 504,000 people will likely be in Crisis (IPC Phase 3) acute food insecurity, and 246,000 people will likely be in Emergency (IPC Phase 4) acute food insecurity. During the lean season, all counties will be classified in Emergency (IPC Phase 4) acute food insecurity, except for Wulu County which will be classified in Crisis (IPC Phase 3) acute food insecurity. The main drivers of food insecurity will be the depletion of own food stocks, limited access to, and reduced functionality of markets because of the rainy season, high food prices in markets and reduced households' income because of the ongoing economic crisis and currency depreciation.

NORTHERN BAHR EL GHAZAL STATE

In **October to November 2022**, an estimated 580,000 people (56.9% of the population) are facing Crisis (IPC Phase 3) or worse acute food insecurity, of which 337,000 people are in Crisis (IPC Phase 3) acute food insecurity, and 173,000 people are in Emergency (IPC Phase 4) acute food insecurity. During this period, all counties were classified in Emergency (IPC Phase 4) acute food insecurity. The key drivers of food insecurity during this period include high food prices, flooding that led to crop damage, increased livestock pests and diseases, closure of the trade route between South Sudan and Sudan that is affecting market functionality.

During the post-harvest period of December 2022 to March 2023, the food security situation is expected to improve with an estimated 533,000 people (56.9% of the population) likely to face Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 349,000 people are in Crisis (IPC Phase 3) acute food insecurity, whereas 184,000 people are in Emergency (IPC Phase 4) acute food insecurity. Food insecurity is mainly driven by the depletion of food stocks for households whose agricultural activities were affected by climatic shocks such as flooding and dry spells; a reduction in access to livestock products as animals start to migrate with the onset of the dry season; the hoarding of food stocks by traders as they wait for the lean season that is characterized by high food prices; and closure of the trade routes between South Sudan and Sudan which is affecting market functionality. To mitigate these effects, some of the households will engage in collection and sale of natural resources, with fishing also supplementing household food sources.

The food security situation is expected to deteriorate during the lean season period of April to July 2023, with an estimated 656,000 people (66.3% of the population) likely to be in Crisis (IPC Phase 3) or worse acute food insecurity. Of these, 379,000 people are likely to be in Crisis (IPC Phase 3) acute food insecurity, and 277,000 people are likely to be in Emergency (IPC Phase 4) acute food insecurity. During the lean season, all counties will be classified in Emergency (IPC Phase 4) acute food insecurity. The key drivers of food insecurity include the seasonal depletion of own stocks, particularly for households whose crop production was negatively affected by climatic shocks; reduced market supplies due to the conflict on the border and poor road conditions during the rainy season leading to high prices; and reduced access to fish and wild foods. While most households will increase their sales of production assets during the April to July 2022 period, the worst affected are likely to migrate either partly or entirely in search of income-earning opportunities and food. During this period, most households in Northern Bahr el Ghazal heavily rely on markets, and the reduced market supplies due to the closure of the border with Sudan is likely to impact market supplies and result in high food prices. Migration of livestock away from homesteads will also lead to decreased access to livestock products. Households will increasingly rely on petty trade and selling of natural resources for income, as well as consumption of wild foods whose availability will increase with the onset of the rainy season.

? Key Drivers

Food availability: In 2021, the country produced 839,500 metric tonnes of cereals, and posted a cereal deficit of 541,000 metric tonnes. 2021's production is 4% lower compared to 2020's production and this is largely because of the flooding that severely affected the eastern half of the country – particularly in Jonglei, Warrap, Lakes, Unity and Upper Nile states. Despite the incidences of insecurity, the Greater Equatoria region posted an increase in production, but both Greater Upper Nile and Greater Bahr el Ghazal regions reported a decrease in production. The 2022 production, which shall be consumed in 2023, will be estimated in the Crop and Food Security Assessment Mission (CFSAM) analysis scheduled for December 2022, with the report likely to be released in February 2023.

Access to food: The continued economic crisis and the gradual deprecation of the local currency will continue to make it difficult for majority of households to access food from markets because of the loss of sources of livelihoods, reduced income, and high food prices. The seasonal deterioration of road infrastructure during the rainy season will also affect market functionality by disrupting the timely restocking of markets. The effects of conflict and insecurity in parts of the country will also lead to displacement, depletion or loss of assets, and disruption of livelihoods, further contributing to reduced income for purchasing food and essential needs.

Food utilization: This is a significant problem over most of the country because of the chronic nature of waterborne diseases, low use of latrines, poor personal hygiene and living environments, and limited access to hygienic materials. Access to health services is also poor which leads to high incidences of diseases that not only affect the health of the population, but also

negatively affects availability of labour and leads to reduced income at household level. WASH needs for the country will be particularly high during the rainy season and will require significant investment to address them.

ACUTE MALNUTRITION SITUATION OVERVIEW AND KEY DRIVERS



Situation Overview

Acute malnutrition in South Sudan remains high and of public health concern. During the current analysis period (July to October 2022), 77 counties were included in the analysis of which 15 counties were classified in IPC AMN Phase 3 (Serious), 30 counties were classified in IPC AMN Phase 4 (Critical), 19 counties were classified in IPC AMN Phase 2 (Alert), and 13 counties were classified in IPC AMN Phase 1 (Acceptable). Overall, 20 out of 30 counties classified in IPC AMN Phase 4 (Critical) were from Jonglei (Akobo, Ayod, Canal Piji, Fangak, Pibor, Nyirol, Duk, Uror, and Twic east), Upper Nile (Baliet, Fashoda, Maban, Malakal, Manyo, Melut, Ulang, Renk, Nasir, Maiwut), Unity (Abiemnhom, Koch, Guit, Rubkona, mayom, Leer, Mayendit, Panyijiar, and Pariang) and Warrap (Twic and Gogrial East) states.

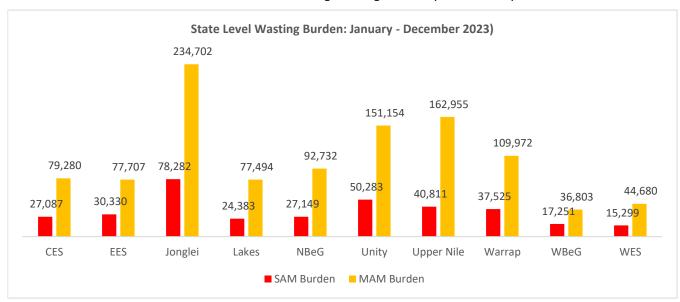
During the first projection analysis period (November 2022 to February 2023), the nutrition situation is expected to deteriorate compared to current analysis period and the number of counties in Serious and Critical situation is expected to increase from 30 to 34 and other counties likely to move from IPC AMN Phase 2 (Alert) situation to IPC AMN Phase 3 (Serious).

As for the second projection period (lean season), the situation is expected to deteriorate further. 59 counties are projected to be in IPC AMN Phase 4 (Critical). This represents the highest number classified in IPC AMN Phase 4 (Critical) for the past 3 similar seasons. Projections show that in the worst-case scenario, several counties in Jonglei (Ayod, Fangak, Uror, Mayendit, Leer and Koch) and Upper Nile (Renk) might fall into IPC AMN Phase 5 (Extremely Critical) during the lean season if the current challenges of funding cuts, sustained flooding, conflict and access challenges remain. Several of these counties (Leer, Fangak and Mayendit) are also projected to have populations in Catastrophe (IPC Phase 5) for AFI during the same lean season. During this period, it is expected to see an increase in diseases and deterioration in the quality of diets among children 6-23.

About 1.4 million children under five years are expected to suffer from acute malnutrition by June 2023. Of these, 345,893 children will likely to suffering from severe acute malnutrition.

Total number of cases of children aged 6-59 months affected by acute malnutrition and in need of treatment

The PIN was calculated by using the recommended two pathways PIN calculation methodology i.e. program data estimates pathway and prevalence estimates pathways were used to estimate burden of acute malnutrition among children under 5 Years. The acute malnutrition was defined based on the new approach called total acute malnutrition that combines weight-for-height (WFH), Mid Upper Arm Circumference (MUAC) measurement and oedema cases into the final burden. The incidence correction factor of 3.6 was used for South Sudan based on the findings of the global study conducted by UNICEF and Harvard University.



? Key Drivers

Key drivers to acute malnutrition include high prevalence of diseases. 62.5% of children reported to have been ill two weeks prior to the assessment. The childhood diseases recorded include Diarrhea, fever, and cough. These diseases are among the most common and fatal diseases among children and cause rapid deterioration in health. Poor sanitation conditions are likely contributing to the high prevalence of illness, with open defecation as high as 50% of households in 56 counties.

Inadequate feeding practices of infant and young children is another major contributing factor. All Infant and Young child feeding (IYCF) indicators remain suboptimal. At national level, Minimum Acceptable Diet was (4.6%), Minimum Dietary Diversity (18.1%), and Minimum meal frequencies (25.2%). Only 4.6% of children 6-23 months are receiving the required food quality at the required frequency. At state level IYCF indicator estimates showed huge variance. Although optimal IYCF remains a challenge across the states, in some states the situation is dire. In Unity, Upper Nile, Jonglei and Eastern Equatoria had a MAD of less than 5%. Overall, the MAD across states ranged from a low of 2.8% to 9.1%.

Elevated levels of food insecurity (IPC AFI Phase 3 and above) in most counties also contribute to acute malnutrition. In the current analysis period of July-October 2022, an estimated 6.6 million people (53% of the population) faced Crisis (IPC Phase 3) or worse acute food insecurity, of which 2.2 million people faced Emergency (IPC Phase 4) and 61,000 in catastrophic (phase 5).

In addition to the immediate drivers at individual level, Limited access to health remain a key driver. There was a significant cut on health budget that supported provision of primary health care. Health pool fund was slashed by 24% reducing critical health support in at least 220 facilities across the country. Funding for key nutrition serves like BSFP remain limited, restricting support to areas with extreme needs only.

Some of the basic causes/drivers are the unprecedented changes in the environment. In some locations, flooding has continued to be a menace for 2 years including unity and Jonglei state. In location with flooding and conflict (Jonglei, Upper Nile, and Unity states) coverage of health services remain low and access for humanitarian support remains limited and costly.

These multiple deprivations, coupled with conflict/insecurity that is leading to displacements and targeting of humanitarian actors is hampering the delivery of live saving programmes and is expected to lead into further deterioration if urgent and adequate support is not provided on time.

RECOMMENDATIONS FOR ACTION

Food Security

Humanitarian food assistance and livelihood support must be scaled up immediately to save lives and prevent total collapse of livelihoods in locations where populations were classified in Catastrophe (IPC Phase 5) and Emergency (IPC Phase 4) acute food insecurity. Furthermore, partners should collect food security, nutrition, and mortality data in the most affected locations to fully assess the severity of the food security and nutrition situation in these areas for timely and appropriate response. For Panyikang and Mayom, the FSNMS data collection teams should visit the counties as soon as the security situation permits it, and thereafter, the state teams of Upper Nile and Unity states respectively should update the analysis and the IPC acute food insecurity population tables and maps.

In all regions, the necessary conditions for addressing the food security crisis are:

- Continued implementation of the peace agreement and addressing the root causes of insecurity across most parts of the country.
- Scale-up provision of humanitarian assistance (in kind and cash transfers) to counties in Crisis (IPC Phase 3) or worse acute food insecurity.
- Provide livelihood support such as seeds and tools (farm inputs) to stimulate production and return it back to surplus levels, particularly in the greenbelt, as well as support farmers to adapt to the climate-induced environmental changes by training them on climate-smart agricultural practices and distributing flood/drought resistant crop varieties.
- Maintain support to small-scale subsistence producers in locations with less agricultural potential and include animal health support.

- Scale up and improve access to basic services, including WASH and health service delivery throughout the year. This should also include emergency nutrition, especially during the lean season.
- Close monitoring of counties (Akobo, Canal/Pigi and Fangak counties in Jonglei State; Pibor County in Greater Pibor Administrative Area; and Leer and Mayendit counties in Unity State) where some of the population is facing, or is likely to face, Catastrophe (IPC Phase 5) levels of acute food insecurity.
- Close monitoring of counties (Canal/Pigi, Fangak, Pibor, Uror, Leer, Mayendit, Tambura, Cueibet and Rumbek North) whose
 food security situation is already dire and is at risk of deteriorating further to a point where lives and livelihoods will be
 jeopardized.

Nutrition

There is need to ensure all existing prevention and treatment programmes are sustained in all locations. In locations where acute malnutrition are at critical and very critical level, intensification of prevention and treatment programme is to be prioritized with a focus to increased coverage and reach. Close monitoring of counties with access challenges is recommended and immediate comprehensive assessment initiated immediately these locations are accessible.

While ensuring universal treatment for acute malnutrition is a priority, attention must also be given to addressing the identified major contributing factors to prevent acute malnutrition in the future. The prevention efforts should focus on childcare practices including improving quality of food consumed by children, improved access to safe water and sanitation services, prevention and treatment, of childhood illness. There is need to intentionally invest in behavior change communication focusing on childcare and feeding.

Concerted efforts between clusters should be a priority in programme design to address factors linked to the high acute malnutrition. More robust surveillance is recommended in locations where the analysis team projected potential risk of phase 5 in worst case scenario of the second projection (Renk, Maban, Baliet, Melut, Ayod, Canal/Piji and Nyirol). This should be coupled with a deeper analysis of the impact of reduced health funding to nutrition programmes, monitoring closely the impact of Ukraine war to operations in South Sudan.

65% percent of counties in phase 3 and above are in Greater Upper Nile region, followed by greater Bahr el Ghazal state. It is recommended that for these counties resource mobilization efforts are taken to address prevention and treatment of malnutrition.

- Scale up and intensification for prevention and treatment of acute malnutrition in counties classified in phase 3 and above.
- Promote and scale up the Maternal Infant and Young Child Nutrition/Infant and Young Child Feeding programmes at all levels.
 This includes focus on nutrition sensitive activities that improve dietary diversification, and utilization.
- Increase surveillance in counties where the nutrition situation is critical, projected to deteriorate and with possible risk in the worst-case scenario of sliding to phase5.
- Prioritize assessment in counties not classified due to lack of data.
- Revisit FSNMS survey design and improve the sampling in high-risk areas.

PROCESS, METHODOLOGY AND LIMITATIONS

PROCESS AND METHODOLOGY

Food Security Analysis: The October 2022 IPC for Acute Food Insecurity (IPC AFI) was conducted physically from 03 to 15 October 2022 and was attended by a multi-agency and multi-sectoral group of about 100 participants. Before the IPC analysis commenced, an IPC refresher training was held for all participants on 03 October 2022. Thereafter, the analysts conducted State level analyses and were vetted by the South Sudan IPC Technical Working Group vetting committee which was comprised of representatives from Government, the UN, NGOs and academia, with some members of the IPC Steering Committee attending as observers. The vetting sessions were moderated by a locally recruited consultant while technical support was provided by experts from the IPC's Global Support Unit and the Regional Support Unit. The primary source of data was from the 28th round of the Food Security and Nutrition Monitoring System (FSNMS) survey, and additional data from field assessment reports from the FSL Cluster partners, market analysis and projections, rainfall estimates and forecasts, population movement data, humanitarian assistance data and Emergency Operational Plans. The State analysis teams provided population numbers for all the analysis periods and considered the impact of humanitarian food assistance (HFA).

Nutrition Analysis: A team of experts and analysts on nutrition, health, food security, WASH and statistics from South Sudan with the support from the Regional and Global IPC Support units carried out the analysis process using the standard IPC for Acute Malnutrition (IPC AMN) protocols and standards. Before the IPC AMN analysis commenced, a two days refresher training was conducted with participation from all analysts, and with support from GSU. Twenty two analysts from NGOs, UN, and Government staff (from national and state level) participated in the IPC AMN analysis. The analysis was conducted from 03 to 15 October 2022. The primary source of data was from the 28th round of the Food Security and Nutrition Monitoring System (FSNMS) survey and County Based SMART surveys.

LIMITATIONS OF THE ANALYSIS

Food Security Analysis: Floods, poor roads, and insecurity delayed data collection in some locations. Panyikang County was not classified because the FSNMS teams were unable to access it because of the insecurity in the County. Mayom County was classified using food security data from a SMART survey conducted in July 2022 together with contributing factors presented by field-based analysis team members who have contextual knowledge of the County and could be able to generate assumptions for the most likely situation during the projection periods. For the projection analysis till July 2023, crop production data that is vital for the analysis was missing, thus forcing the teams to use past trends of crop production, the 2022 rainfall performance, and security/accessibility conditions to estimate next year's production levels.

Nutrition Analysis: One County (Panyikang) was not classified due to lack of data. Although the County fell within a defined domain, it was not accessible during the assessment period. Most of the counties were classified based on data that scored a reliability of one (1). Since at County level the clusters were not adequate for a minimum recommended 25 clusters, several counties were grouped into domains (based on similar livelihood characteristics). This was also the case for most of the contributing factors that supported decisions on classification. The analysis team did not have representation from the academia.

Estimating effect of HFA: The South Sudan IPC Technical Working Group used the food assistance data provided by the Food Security Cluster (FSC) which provided the total number of beneficiaries and the quantity (tonnes) of HFA delivered. Information from FSC partners revealed that a full ration comprises 17.55kg of mixed commodities per person per month. The TWG first estimated the percentage ration size provided through HFA for the period of analysis. Using this information, areas where at least 25% of the population were targeted with between 25-50% of their kilocalorie needs were flagged with a light grey bag, whereas areas where at least 25% of the population was targeted with more than 50% of their kilocalorie needs were flagged with a dark grey bag. In determining the unmet needs i.e., population in need of humanitarian food assistance after considering HFA, perfect targeting was assumed thus meaning that the people in the worst-off phases benefit first from the HFA distribution before the remainder of the HFA, if any, is assigned to better off phases.

What is the IPC, IPC Acute Food Insecurity and IPC Acute Malnutrition?

The **IPC** is a set of tools and procedures to classify the severity and characteristics of acute food and nutrition 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.

For the IPC, **Acute Food Insecurity** and **Acute Malnutrition** are defined as any manifestation of food insecurity or malnutrition found in a specified area at a specific point in time of a severity that threatens lives or livelihoods, or both, regardless of the causes, context or duration. The **IPC Acute Malnutrition Classification** is highly susceptible to change and can occur and manifest in a population within a short amount of time, as a result of sudden changes or shocks that negatively impact the determinants of food insecurity.

The IPC Acute Malnutrition Classification's focus is on identifying areas with a large proportion of children acutely malnourished preferably by measurement of Weight for Height Z-Score (WHZ) but also by Mid-Upper Arm Circumference (MUAC).