



COMMUNICATION BELIEF: KENYA NUTRITION SITUATION IN ARID AND SEMI ARID AREAS, MARCH 2020

1.0 Key Facts and Messages

- According to integrated acute malnutrition phase classification (IPC-AMN) conducted in February 2020, nutrition situation has improved across counties mainly attributed to improved food security situation including increased milk production and consumption and is expected to improve or remain similar during the projection period (Figures 1, 2 and 3).
- Despite, improvement in food security, pre-existing factors such as inadequate infant and childcare practices, poor WASH¹, sub-optimal coverage of interventions coupled with poverty and frequent shocks continue to negatively impact on nutrition situation across ASAL Counties. In this regard, arid areas though reporting improving trends continue to report critical levels of acute malnutrition.
- There have been minimal effects of the current desert locust invasion on food and nutrition situation as the impacts have been mitigated by significantly above average forage in pastoral areas and already harvested crop in the cropping areas. However, food security is expected to deteriorate in areas invaded by swarms during the projection period and will negatively impact nutrition situation in affected households.
- There is need for continued efforts to strengthen multi-sectoral linkages and coordination forums at the county level to address the underlying and basic causes of the high levels of acute malnutrition reported even in non-drought periods
- The total number of children 6 to 59 months requiring treatment of acute malnutrition is 369,379 while 78,328 pregnant and lactating women require treatment (Table 1).

Number of children and PLW requiring treatment of acute malnutrition		
		February 2020
	Total caseload acutely malnourished children	369,379
	SAM 6-59m caseload	78,908
	MAM 6-59m caseload	290,471
	PLW caseload	78,329

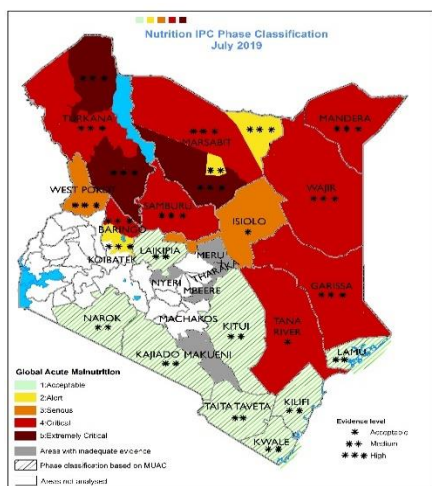


Figure 1. Nutrition Situation, July 2019

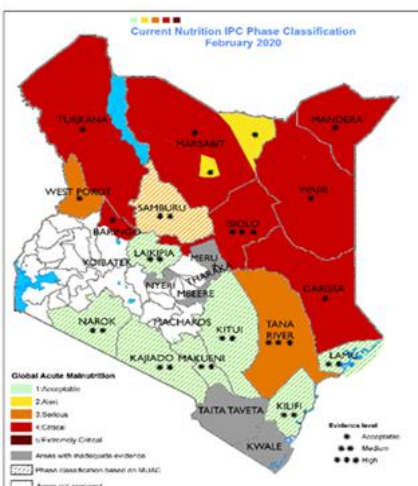


Figure 2. Current (SRA 2019) Nutrition Situation

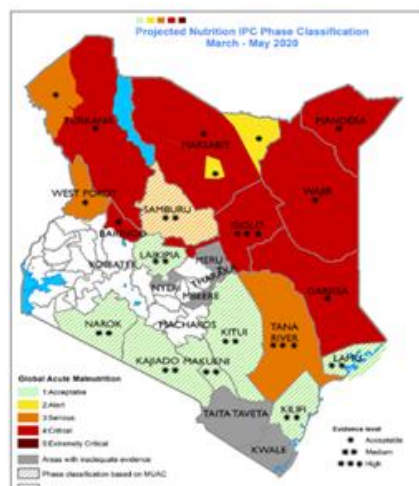


Figure 3. Projected Nutrition Situation

¹ WASH: Water hygiene and sanitation

Table 1: Summary of total caseload and target, February 2020

Area	Global Acute Malnutrition children 6 to 59 months		Severe Acute Malnutrition, Children 6 to 59 Months		Moderate Acute Malnutrition, Children 6 to 59 Months		Pregnant and Lactating Women	
	Total Caseload	Target	Total caseload	Target	Total caseload	Target	Total caseload	Target
ASAL	310,115	169,800	58,890	44,168	251,265	125,633	76,540	76,540
Urban	59,224	34,616	20,018	15,013	39,206	19,602	1,788	1,788
Grand Total	369,379	204,417	78,908	59,181	290,472	145,236	78,328	78,328

2.0 Situation summary and key drivers

According to acute malnutrition integrated phase classification (IPC AMN) conducted in February 2020, nutrition situation has improved compared to the 2019 Long Rains Season in most of the Counties though it remains critical (IPC AMN phase 4) in Garissa, Wajir, Mandera Turkana, and Isiolo Counties as well as North Horr and Laisamis sub-counties in Marsabit County and Tiaty sub-county in Baringo County (Figure 1 and 2). A notable improvement was realized in Turkana North, Turkana South and Laisamis sub-counties which were classified as extremely critical (IPC AMN phase 5) during the 2019 Long Rains Assessment (2019 LRA) which was conducted in July 2019. Deterioration was however realized in Isiolo County which was classified in the serious phase but is currently classified in the critical phase.

Counties that were classified in serious phase (IPC AMN phase 3) included Tana River, Samburu and West Pokot Counties where notable improvement was realized in Tana River County and Samburu which were in Critical phase during the 2019 LRA. Moyale and Saku sub-counties in Marsabit County were classified in alert (IPC AMN phase 2) while Kilifi, Lamu, Kitui, Makueni, Laikipia, Kajiado and Narok were classified as acceptable (IPC AMN phase 1). The improved nutrition situation is mainly attributed to good performance of the 2019 short rains that resulted in improved food security situation including higher milk production and consumption across ASAL counties. Other factors included better terms of trade and reduced trekking distances to water sources in the agro-pastoral and pastoral areas.

Nutrition situation is expected to improve across counties in the North-West Cluster², Coastal and South East Marginal Clusters while the situation will remain similar in the Agro-pastoral and North-East Clusters (except Garissa County where the situation is expected to improve) during the projection period since food security situation which remains the most important driver of nutrition status in the arid counties is projected to improve or remain stable in most areas (Figure 3).

The main drivers to acute malnutrition include; pre-existing infant feeding and childcare practices, sub-optimal coverage of health and nutrition and poverty coupled with multiple shocks such as floods and mudslides. Other drivers of acute malnutrition include poor hygiene and sanitation practices. Flooding negatively impacted on WASH whereby toilets were washed away. Poor hygiene and sanitation resulted to increase in water-borne diseases such as diarrhea and cholera outbreak. Flooding resulted in the loss of livelihoods as well as interruption of response actions that were being implemented eroding the gains previously made as a result of response actions. Further, there was the disruption of transport networks making some areas impassable and interfering with markets and food accessibility. There have been minimal effects of the current desert locust invasion on food and nutrition situation as the impacts have been mitigated by significantly above average forage in pastoral areas and already harvested crop in the cropping areas

² North-West Livelihood Cluster: Turkana, Marsabit, Samburu. North-East Livelihood Cluster: Garissa, Mandera, Wajir, Isiolo, Tana River. South Eastern Marginal Agricultural Livelihood Cluster: Makueni, Kitui, Mbeere, Tharaka, Meru North. Coastal Marginal Agricultural Livelihood Cluster: Lamu, Taita Taveta, Kwale, Kilifi. Agro-Pastoral Livelihood Cluster: East Pokot/Tiaty, West Pokot, Kieni, Kajiado, Narok, Laikipia

3.0 Desert locust invasion; implications on food and nutrition security situation

According to the Kenya locust and food security update conducted during the 2019 short rain assessment, desert locust invasion has had minimal effects on pasture, browse as well as crop as most of the crops had been harvested. The most likely scenario during the projection period is a significant deterioration of food security in the affected households in areas invaded by swarms. The greatest food security impacts will be experienced by cropping households that are already classified in stressed phase and above. Pastoral households in areas where the swarms will invade repeatedly will experience considerable effects on food insecurity due to strained pasture and browse despite the above normal rains. This will have negative impact on the nutrition situation in the affected households.

4.0 Recommendations for actions

- Update the nutrition response plan and county contingency plans
- Continue efforts to strengthen multi-sectoral linkages and coordination forums at the county level to address the underlying and basic causes of the high levels of acute malnutrition reported even in non-drought periods
- Continue to strengthen system capacity to deliver WASH, health and nutrition services for improved program quality and coverage – to ensure access to services is not further compromised in the face of scaling down integrated outreach services
- Advocate for national and county government allocation to procure commodities for management of acute malnutrition
- Closely monitor and respond to households affected by desert locust invasion to mitigate effects on food insecurity and malnutrition
- Engagement with COVID-19 coordination and preparedness mechanisms to mitigate likely impacts on food and nutrition security in the event cases are reported in the country
- Sustain program performance monitoring, coordination and surveillance

5.0 Detailed Number of children who are acutely malnourished and in need of treatment

The total number of children 6 to 59 months requiring treatment of acute malnutrition is 369,379 while 78,329 pregnant and lactating women require treatment (Table 2 and Figure 4). The number of children requiring treatment has significantly reduced as a result of the improved food security situation and new population estimates from the 2019 Census.

Table 2: Estimated caseloads and Targets, GAM, MAM and SAM

	Total Caseload	Target	Total Caseload	Target	Total Caseload	Target	Total Caseload	Target
Baringo	15509	8804	4198	3149	11311	5655	2158	2158
Embu	1283	663	86	64	1197	599	229	229
Garissa	27715	14784	3706	2780	24009	12005	6799	6799
Isiolo	10312	5387	926	695	9386	4693	1848	1848
Kajiado	17578	9578	3155	2366	14423	7211	4896	4896
Kilifi	13289	7584	3756	2817	9534	4767	431	431
Kitui	7628	4631	3269	2452	4359	2179	808	808
Kwale	8613	4915	2434	1826	6179	3089	1092	1092
Laikipia	8280	4399	1035	776	7245	3622	1493	1493
Lamu	1025	560	192	144	833	416	277	277
Machakos	22957	13938	9837	7378	13120	6560	1507	1507
Makueni	3624	2160	1394	1045	2230	1115	800	800

	Total Caseload	Target	Total Caseload	Target	Total Caseload	Target	Total Caseload	Target
Mandera	42053	22421	5576	4182	36477	18239	12216	12216
Marsabit	17384	9321	2515	1886	14869	7435	6854	6854
Meru	5494	3047	1202	901	4292	2146	863	863
Narok	12965	6753	1080	810	11885	5942	514	514
Nyeri	818	424	58	44	760	380	119	119
Samburu	9251	4880	1020	765	8231	4115	3792	3792
Taita Taveta	2293	1258	447	336	1846	923	143	143
Tana River	10013	5522	2064	1548	7949	3975	2080	2080
Tharaka Nithi	696	386	152	114	543	272	112	112
Turkana	33277	18131	5972	4479	27305	13653	13679	13679
Wajir	24021	12806	3179	2384	20842	10421	9912	9912
West Pokot	14079	7449	1637	1228	12442	6221	3916	3916
	310,155	169,800	58,890	44,168	251,265	125,633	76,540	76,540
Kisumu	4,723	2,842	1,920	1,440	2,803	1,402	336	336
Mombasa	10,264	6,680	6,194	4,645	4,070	2,035	84	84
Nairobi	44,237	25,094	11,904	8,928	32,333	16,166	1,368	1,368
Urban	59,224	34,616	20,018	15,013	39,206	19,603	1,788	1,788
Grand total	369,379	204,417	78,908	59,181	290,472	145,236	78,328	78,328

The automated standard Kenya Caseload Tracker was used to calculate the caseloads. The number of children requiring treatment was determined by analysis area using global acute malnutrition by weight for height (GAM WHZ) prevalence in the ASAL areas. The formula used to calculate the caseloads was $\text{Case load} = N \times P \times K \times C$ where N is the Population of children 6 to 59 month in the area, p is the estimated prevalence of SAM or MAM, K is a correction factor to account for new /incident cases over a given time period in this case K is 2.6, C is the mean coverage that is expected to be achieved by the program over the time period). Programmatic experience and considerations such as actual number of children admitted to the program in the previous year was also considered and the caseloads adjusted accordingly. Caseload calculation for the pregnant and lactating women was mainly based on programmatic experience coupled with technical discussion and consensus. Since urban areas report high caseloads due to higher populations living in these areas especially in the informal settlements, caseload for urban areas were also calculated to inform planning.

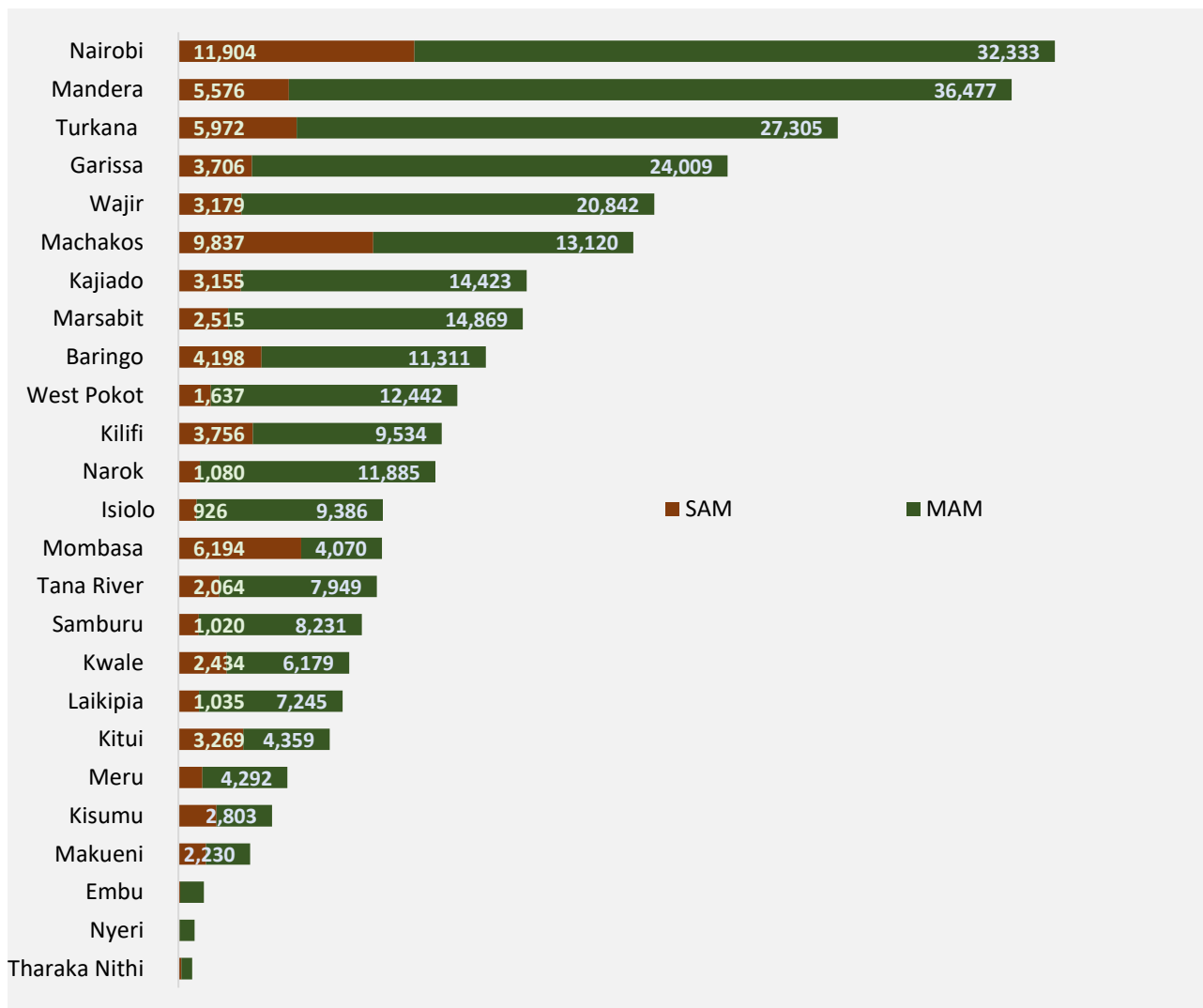


Figure 4: Estimated caseloads for MAM and SAM, February 2020

6.0 Process and Methodology

Analysis of nutrition situation was based on IPC acute malnutrition version 3. Before the analysis, a three days training was done to the analysis team on the protocols with continued technical support throughout the analysis and report writing process. Groups of experienced technical leads were formed to allow for peer support especially for new analysts and plenary sessions held to allow for further technical review, inputs, and consensus. Data was gathered from multiple sources such as representative surveys, mass screening, routine data from the DHIS2, outbreak reports and the National Drought Management Authority sentinel surveillance. Only data of acceptable quality was used in the analysis. The analysis resulted in a current situation update and projection of the situation. The severity of acute malnutrition was referenced against international standards (Figure 5) and key contributing factors both food security and non-food security-related factors were identified using the IPC for acute malnutrition conceptual framework (Figure 5) as laid out in the analysis worksheet. Since both IPCs were conducted

simultaneously, results from the IPC for acute malnutrition were included Food Security analysis and results from Food Security IPC were also included in the IPC for acute malnutrition analysis. Finally, response actions and risk factors to monitor were identified.

Phase name and description	Phase 1 Acceptable	Phase 2 Alert	Phase 3 Serious	Phase 4 Critical	Phase 5 Extremely Critical
	Less than 5% of children are acutely malnourished.	5-9.9% of children are acutely malnourished.	10-14.9% of children are acutely malnourished.	15-29.9% of children are acutely malnourished. The mortality and morbidity levels are elevated or increasing. Individual food consumption is likely to be compromised.	30% or more children are acutely malnourished. Widespread morbidity and/or very large individual food consumption gaps are likely evident.
	The situation is progressively deteriorating, with increasing levels of acute malnutrition. Morbidity levels and/or individual food consumption gaps are likely to increase with increasing levels of acute malnutrition.				
Priority response objective to decrease acute malnutrition and to prevent related mortality. ²	Maintain the low prevalence of acute malnutrition.	Strengthen existing response capacity and resilience. Address contributing factors to acute malnutrition. Monitor conditions and plan response as required.	Urgently reduce acute malnutrition levels through →		
			Scaling up of treatment and prevention of affected populations.	Significant scale-up and intensification of treatment and protection activities to reach additional population affected.	Addressing widespread acute malnutrition and disease epidemics by all means.
Global Acute Malnutrition (GAM) based on weight for height Z-score (WHZ)	<5%	5.0 to 9.9%	10.0 to 14.9%	15.0 to 29.9%	≥30%
Global Acute Malnutrition (GAM) based on mid-upper arm circumference (MUAC)	<5%				
	5-9.9%				
	10-14.9%				
	≥15%				
*GAM based on MUAC must only be used in the absence of GAM based on WHZ; the final IPC Acute Malnutrition phase with GAM based on MUAC should be supported by the analysis of the relationship between WHZ and MUAC in the area of analysis and also by using convergence of evidence with contributing factors. In exceptional conditions where GAM based on MUAC is significantly higher than GAM based on WHZ (i.e. two or more phases), both GAM based on WHZ, and GAM based on MUAC should be considered, and the final phase should be determined with convergence of evidence.					
Notes:					
1. Refers to the increased risk of mortality with the increased levels of acute malnutrition.					
2. Priority response objectives recommended by the IPC Acute Malnutrition Reference Table focus on decreasing acute malnutrition levels; specific actions should be informed through a response analysis based on the information provided by analyses of contributing factors to acute malnutrition as well as delivery-related issues, such as government and agencies' capacity, funding, insecurity in the area, etc.					
3. GAM based on WHZ is defined as WHZ < -2 or presence of oedema; GAM based on MUAC is defined as MUAC < 125mm or presence of oedema					

Figure 5: IPC acute malnutrition Reference Table

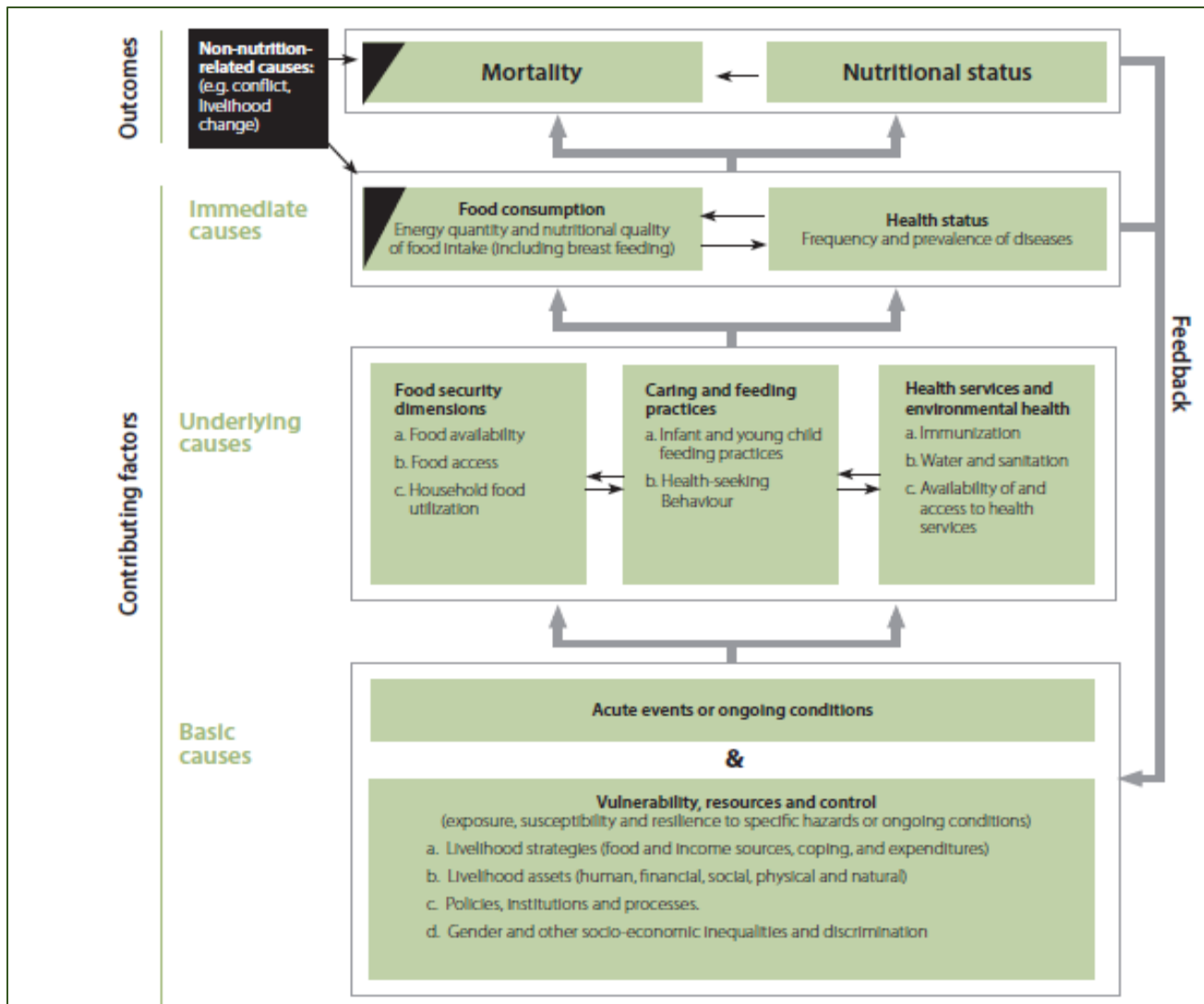







Figure 6: IPC acute malnutrition analytical framework






7.0 Acute malnutrition Prevalence, February 2020

Areas	Survey timing	GAM WHZ children 6 to 59 months	SAM WHZ children 6 to 59 months	GAM MUAC children 6 to 59 months	SAM MUAC children 6 to 59 months	PLW (%)	Plausibility score
Isiolo	Feb-2020	16.7	1.5	4.2	0.7	6.8	5
Tana River	Feb-2020	13.1	2.7	2.2	0.3	3.9	5
Marsabit - Laisamis	Jul-19	30.7	6.4	6.4	1.2	21.7	1
Marsabit North Horr	Jul-19	25.1	3.1	4.5	0.5	14.6	4
Marsabit - Moyale	Jul-19	9	1.2	3.7	0.7	5.5	1
Marsabit - Saku	Jul-19	9.5	1	0.9	0.5	2	9
West Pokot County	Jun-19	11.7	1.9	3	0.2	3	2
Wajir County	Jun-19	16.4	2.7	4.8	1.5	4.2	4
Turkana Central	Jun-19	20.2	2.8	7.4	0.5	8.4	7
Turkana North	Jun-19	30.2	7.4	11.4	1.7	9.8	7
Turkana South	Jun-19	30.8	7.8	8.9	1.6	10.7	5
Turkana West	Jun-19	23	5.7	11.4	3	7.2	0
Baringo (East Pokot)	Jul-19	20.9	3.5	8.1	0.8	6.8	3
Baringo (Baringo North Marigat)	Jul-19	9.3	2.3	3.4	1.1	1.5	3
Samburu County	Jun-19	15.8	2.4	3.6	0.2	11.4	5
Garissa County	Jun-19	17.2	2.3	6.1	0.9	4.2	5
Mandera County	Jul-19	21.9	4	8.7	2.4	3.2	10

8.0 Summary of Key Drivers

PASTORAL NORTH WEST LIVELIHOOD CLUSTER (TURKANA, MARSABIT, SAMBURU)										
Contributing Factors		Turkana North	Turkana Central	Turkana West	Turkana South	Samburu	Laisamis	Saku	North Horr	Moyale
Inadequate dietary intake 	Minimum Dietary Diversity (MDD)									
	Minimum Meal Frequency (MMF)									
	Minimum Acceptable Diet (MAD)									
	Minimum Dietary Diversity – Women (MDD-W)									
	Others									
Diseases 	Diarrhoea									
	Dysentery									
	Malaria									
	HIV/AIDS prevalence									
	Acute Respiratory Infection									
	Disease outbreak									
	Others									
Inadequate access to food 	Outcome of the IPC for Acute Food Insecurity 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									
	Others									
Insufficient health services & unhealthy environment 	Measles vaccination									
	Polio vaccination									
	Vitamin A supplementation									
	Skilled birth attendance									
Legend		Major Contributing Factor		Minor Contributing Factor		No Contributing Factor			No data	

PASTORAL NORTH EAST LIVELIHOOD CLUSTER

Contributing Factors			Wajir	Mandera	Tana River	Garissa	Isiolo
	Inadequate dietary intake	Minimum Dietary Diversity (MDD)	Major	Major	Major	Major	Major
		Minimum Meal Frequency (MMF)	Major	Major	Major	Major	Major
		Minimum Acceptable Diet (MAD)	Major	Major	Major	Major	Major
		Minimum Dietary Diversity – Women (MDD-W)	Minor	Major	Major	Major	Minor
		Others	No	No	No	No	No
	Diseases	Diarrhoea	Major	Minor	Minor	Major	Major
		Dysentery	No	Minor	No	Major	Minor
		Malaria	No	Minor	Major	Major	Major
		HIV/AIDS prevalence	No	Minor	No	Minor	Major
		Acute Respiratory Infection	Major	Major	Major	Major	Major
		Disease outbreak	Major	Minor	No	Major	Minor
		Others	No	No	No	Major	No
	Inadequate access to food	Outcome of the IPC for Acute Food Insecurity analysis	No	Major	Major	Minor	No
	Inadequate care for children	Exclusive breastfeeding under 6 months	Major	Minor	Major	Minor	Major
		Continued breastfeeding at 1 year	Major	Minor	No	Major	Major
		Continued breastfeeding at 2 years	Minor	Minor	No	Major	Minor
		Introduction of solid, semi-solid or soft foods	Major	Minor	No	No	Major
		Others	No	No	No	No	No
	Insufficient health services & unhealthy environment	Measles vaccination	Minor	Minor	No	Minor	No
		Polio vaccination	Minor	Minor	No	Minor	No
		Vitamin A supplementation	Major	Major	Minor	Major	No
		Skilled birth attendance	Minor	Minor	No	No	Minor

Legend



Major Contributing Factor



Minor Contributing Factor



No Contributing Factor





No Data

AGRO PASTORAL LIVELIHOOD CLUSTER

Contributing Factors			Baringo (East Pokot & Tiaty)	Kajiado	Kieni	Narok	Laikipia	West Pokot
	Inadequate dietary intake	Minimum Dietary Diversity (MDD)	Dark Grey	Light Blue		Dark Grey	Blue	Blue
		Minimum Meal Frequency (MMF)	Dark Grey	Light Blue		Dark Grey	Dark Grey	Blue
		Minimum Acceptable Diet (MAD)	Dark Grey	Light Blue		Dark Grey	Dark Grey	Blue
		Minimum Dietary Diversity – Women (MDD-W)	Dark Grey	Light Blue		Dark Grey	Grey	Blue
		Others	Dark Grey	Dark Grey		Dark Grey	Dark Grey	Dark Grey
	Diseases	Diarrhoea	Light Blue	Blue		Light Blue	Light Blue	Light Blue
		Dysentery	Grey	Grey		Grey	Grey	Grey
		Malaria	Blue	Dark Grey		Light Blue	Light Blue	Light Blue
		HIV/AIDS prevalence	Dark Grey	Grey		Grey	Grey	Grey
		Acute Respiratory Infection	Light Blue	Light Blue		Light Blue	Blue	Blue
		Disease outbreak	Light Blue	Grey		Grey	Grey	Light Blue
		Others	Dark Grey	Dark Grey		Dark Grey	Dark Grey	Dark Grey
	Inadequate access to food	Outcome of the IPC for Acute Food Insecurity analysis	Light Blue	Light Blue		Light Blue	Light Blue	Dark Grey






SOUTH EASTERN MARGINAL AGRICULTURAL LIVELIHOOD CLUSTER

Contributory Factors			Meru North	Tharaka	Mbeere	Kitui	Makueni
	Inadequate dietary intake	Minimum Dietary Diversity (MDD)					
		Minimum Meal Frequency (MMF)					
		Minimum Acceptable Diet (MAD)					
		Minimum Dietary Diversity – Women (MDD-W)					
		Others					
	Diseases	Diarrhoea					
		Dysentery					
		Malaria					
		HIV/AIDS prevalence					
		Acute Respiratory Infection					
		Disease outbreak					
		Others					
	Inadequate access to food	Outcome of the IPC for Acute Food Insecurity 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			
		Others			
	Insufficient health services & unhealthy environment	Measles vaccination			
		Polio vaccination			
		Vitamin A supplementation			
		Skilled birth attendance			



COASTAL MARGINAL AGRICULTURE LIVELIHOOD CLUSTER (KWALE, KILIFI, LAMU AND TAITA TAVETA COUNTIES)

Contributory Factor			Kwale	Kilifi	Lamu	Taita Taveta
	Inadequate dietary intake	Minimum Dietary Diversity (MDD)		High		
		Minimum Meal Frequency (MMF)		High		
		Minimum Acceptable Diet (MAD)		High		
		Minimum Dietary Diversity – Women (MDD-W)		High		
		Others		Low		
	Diseases	Diarrhoea		High		
		Dysentery		Medium		
		Malaria		High		
		HIV/AIDS prevalence		Medium		
		Acute Respiratory Infection		Medium		
		Disease outbreak		Low		
		Others		Low		
	Inadequate access to food	Outcome of the IPC for Acute Food Insecurity analysis		Low		
	Inadequate care for children	Exclusive breastfeeding under 6 months		High		
		Continued breastfeeding at 1 year		Medium		
		Continued breastfeeding at 2 years		Low		
		Introduction of solid, semi-solid or soft foods		High		
		Others		Low		
	Insufficient health services & unhealthy environment	Measles vaccination		Low		
		Polio vaccination		Low		
		Vitamin A supplementation		Low		
		Skilled birth attendance		Low		



Participating Partners



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