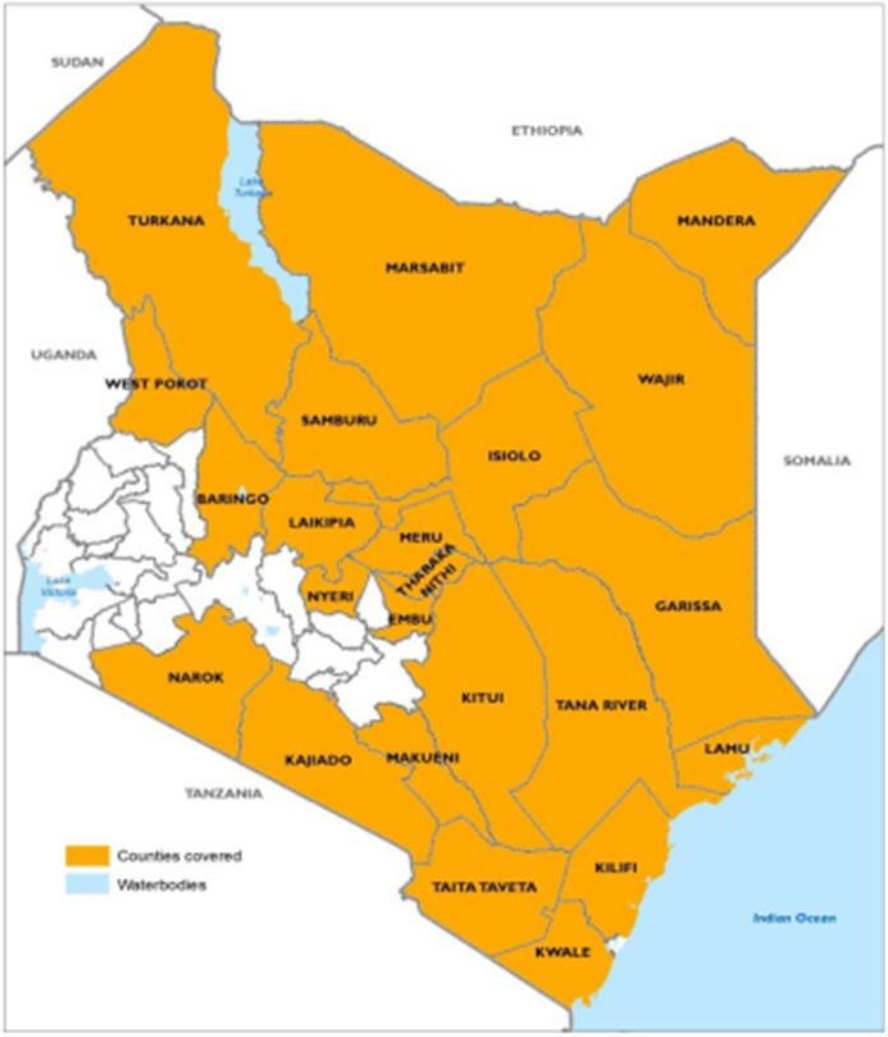
REPUBLIC OF KENYA

MINISTRY OF HEALTH



NUTRITION SITUATION REPORT FOR ARID AND SEMI ARID AREAS, FEBRUARY 2019

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CHAPTER 1: INTRODUCTION

1.1 Background

Acute malnutrition among children and women remains a challenge in Kenya especially in the arid areas. This is often aggravated by other acute factors such as high prevalence of communicable diseases, acute food insecurity and decreased access to water as distances increase during dry spells. This is worsened by chronic issues such as poverty, low literacy levels and poor access to health services. Surveillance mechanisms such as the early warning system, rapids assessments, small scale surveys, routine data collection and analysis and, seasonal assessments exist to inform timely response and planning.

The Kenya Food Security Steering Group (KFSSG) under the leadership of the National Drought Management Authority (NDMA) undertakes the biannual seasonal assessments i.e. Long Rains Assessment (LRA) and Short Rains Assessment (SRA). Key sectors involved in the assessment include education, health, nutrition, agriculture, livestock and water sectors. The assessment findings are disseminated at the Kenya Food Security Meeting (KFSM) as well as respective sector coordination structures for contingency, and response planning as well as to inform medium and long-term actions to address acute food and nutrition insecurity.

1.2 Analysis Period

The 2018 long rains assessment report writing workshop was conducted on 25th February to 6th March 2019 and was preceded by a pre-assessment training for the SRA field teams and visit to counties. Integrated Phase Classification (IPC) for Acute Malnutrition was conducted alongside the Food Security Integrated Phase Classification. Specifically, nutrition IPC training Version 3 was done on 25th to 27th February followed by a full analysis from 28th to 2nd March 2019 - this was done in a separate room within the same venue of the food security IPC analysis to allow for consultations and complementarity. The nutrition team then joined the food security team from 3rd to 6th March to consolidate analysis, finalize reports and prepare joint dissemination products.

1.3 Analysis Team

The IPC for acute malnutrition analysis team comprised participants from the national and county governments, line ministries, donor, UN agencies, Civil Society Organizations, IPC Global/regional office and academic institutions. The analysis team was trained on IPC for acute malnutrition before analysis (See agenda and participants list – Annex 1 and 2).

1.4 Geographic Coverage

The assessment covered 23 counties classified as arid and semi-arid. These counties are also considered to be the most vulnerable to acute malnutrition. They include: Mandera, Garissa, Tana River, Wajir, Isiolo, Turkana, Samburu, Marsabit, Baringo, Laikipia, West Pokot, Kajiado, Narok, Kitui, Makueni, Nyeri (Kieni), Meru (Meru North), Embu (Mbeere), Tharaka Nithi (Tharaka), Kwale, Taita Taveta, Kilifi and Lamu. The unit of analysis was dependent on homogeneity/heterogeneity of the prevalence of acute malnutrition in a county. As such Turkana and Marsabit Counties had four units of analysis each while Wajir had 2 units of analysis. 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 during the report writing workshop to inform planning.

1.5 Objectives

The objective of the bi-annual the assessments conducted after the long and short rains is to determine how each season has affected food and nutrition security. Specific objective of the IPC for acute malnutrition workshop include:

- To conduct training on IPC for acute malnutrition to reinforce skills of analysis team to conduct quality analysis
- To assess the severity of acute malnutrition by referencing against international standards and identify areas that are most affected by acute malnutrition
- Identify the main drivers of acute malnutrition
- Determine the number (caseloads) of children 6 to 59 months and Pregnant and Lactating Women PLW to inform response
- Identify the major priority response objectives
- Develop communication and disseminate the findings:
  - Develop communication materials - infographic, communication brief, situation report, updated website and survey dashboard
  - Present findings at the Kenya Food Security Meeting (KFSM) and Emergency Nutrition Advisory Group

1.6 Key Outputs

- Participants trained on nutrition IPC – two and half days training, coaching and mentorship during analysis
- Analysis worksheets by analysis area with repository/references
- Situation brief/Communication template
- Situation maps – current and projected
- Infographic/one-page summary
- Full nutrition situation report
- Health and nutrition sector sections in the LRA reports reviewed/developed

- Dissemination slides
- Updated caseloads tracker
- Material submitted for uploading on the nutrition website www.nutritionhealth.or.ke

CHAPTER TWO: METHODS

2.1 Analysis Protocols

Analysis during the workshop applied the global protocols for Integrated Phase Classification for Acute Malnutrition version 3. A three days training was done to analysis team on the protocols with continued technical support throughout the analysis and report writing process. Groups with 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. In this regard, it was not possible to classify selected areas especially semi-arid counties due to lack of sufficient evidence to classify.

The analysis resulted to a current situation update and projection of the situation. Severity of acute malnutrition was referenced against international standards (Figure 2.1) and key contributing factors both food security and non-food security related factors were identified using the IPC for acute malnutrition conceptual framework (Figure 2.2) as laid out in the analysis work sheet. 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 were identified. A one-page summary of the situation including maps was developed.

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[1] 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.
	Situation 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 measured by Weight of Height Z-score and/or Oedema (GAM by WHZ)	<5%	5.0 to 9.9%	10.0 to 14.9%	15.0 to 29.9%	≥30%
Global Acute Malnutrition measured by Mid-Upper Arm Circumference and/or Oedema (GAM by MUAC)	<5%	5-9.9%	10-14.9%	≥15%	

*GAM by MUAC must only be used in the absence of GAM by WHZ; final IPC AMN phase with GAM by 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 by MUAC is significantly higher than GAM by WHZ (i.e. two or more phases), both GAM by WHZ and GAM by MUAC should be considered, and the final phase should be determined with convergence of evidence.

Figure 2.1: IPC for Acute Malnutrition Reference Table

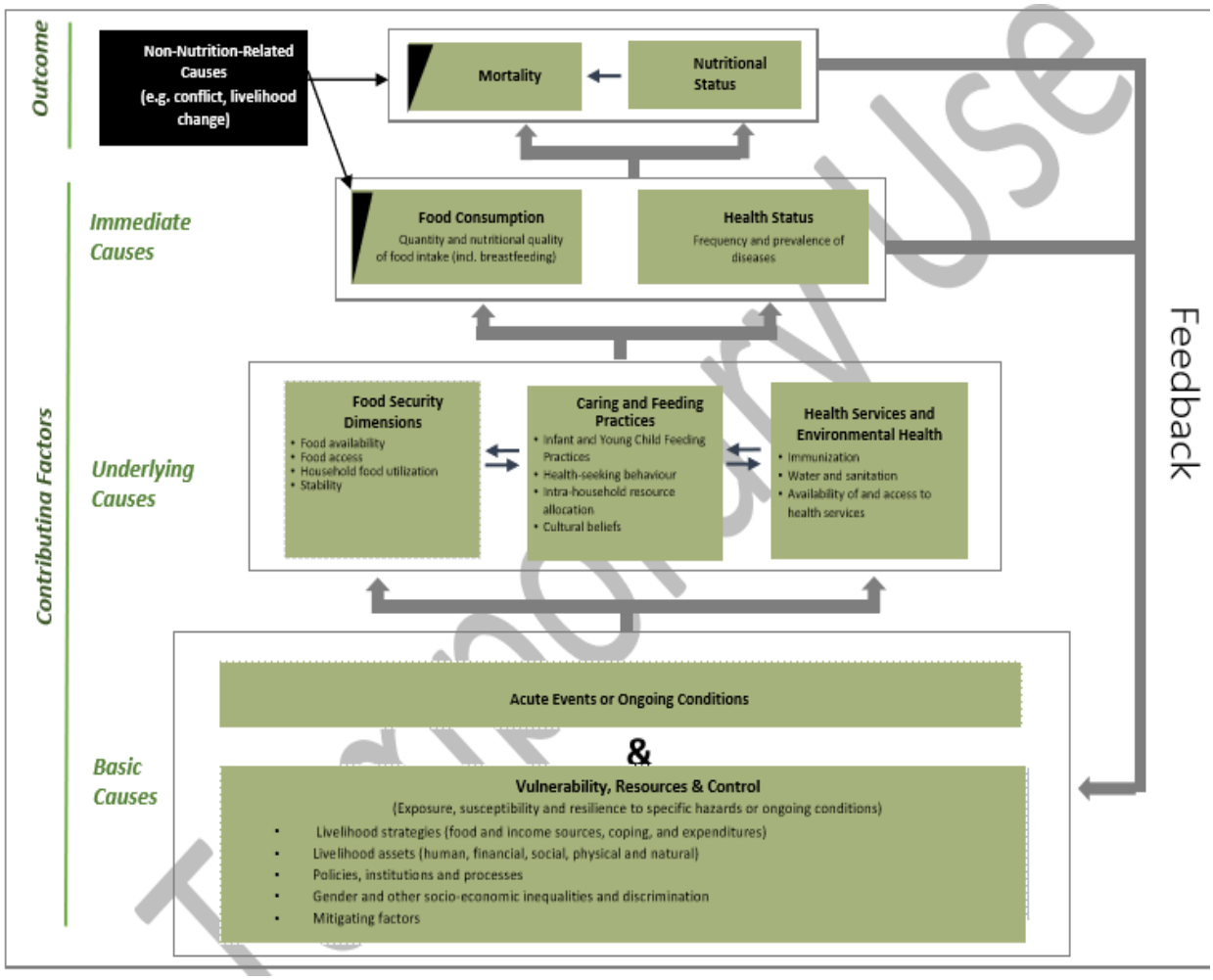


Figure 2.2: IPC for acute Malnutrition Analytical Framework

CHAPTER 3: RESULTS

3.1 National Nutrition Situation – Key Messages

- According to the integrated Phase Classification conducted in February 2019, the nutrition situation is stable across the Arid and Semi-Arid (ASAL) areas though still above emergency thresholds - Global Acute Malnutrition (GAM) ≥15 percent in Turkana, Samburu and Mandera counties as well East Pokot and North Horr sub-counties

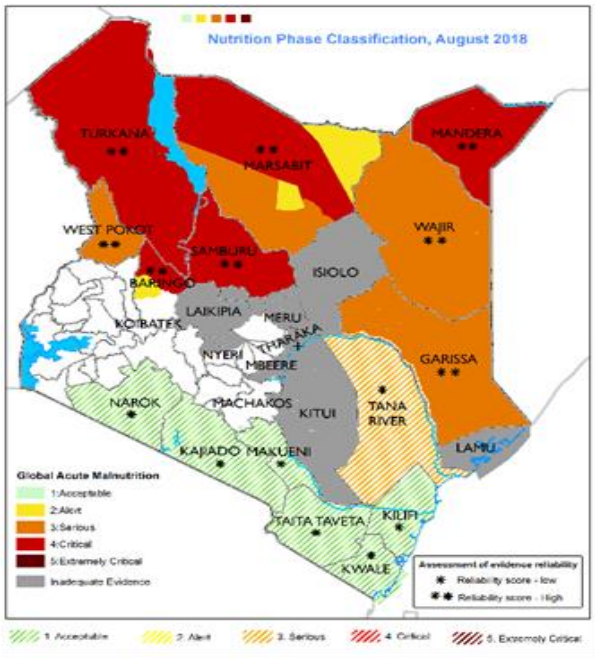


Figure 3.1. LRA 2018

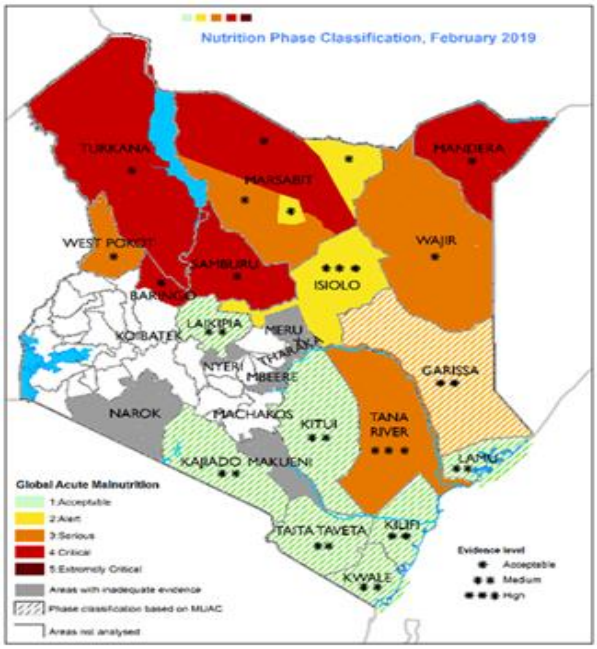


Figure 3.2 Current Nutrition Situation

- The stable nutrition situation is attributed to the positive impacts of the 2018 long rains which have mitigated the otherwise negative effects of the below average 2018 short rains
- The nutrition situation is projected to remain stable in most areas however there is potential for deterioration if 2019 long rains perform poorly.
- Poor child care practices and environment, morbidities and inadequate access to health care services continue to negatively impact on health and nutrition situation in arid counties
- Continued implementation of the high impact health and nutrition interventions with focused effort to improve coverages in counties with inadequate coverages is required
- The estimated number of children 6 to 59 months requiring treatment of acute malnutrition is 541,309 (severe acute malnutrition 113,941

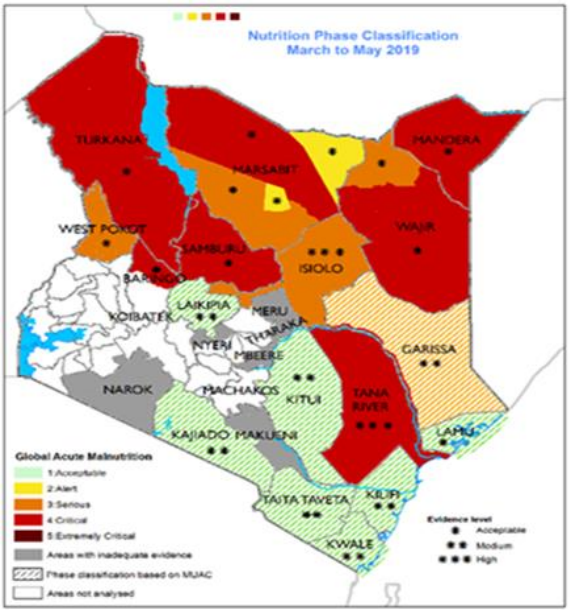


Figure 3.3 Projected Nutrition

and moderate acute malnutrition 427,368) while 30,712 pregnant lactating women (PLW) require treatment.

3.2 National Nutrition Situation Overview

Integrated Phase Classification (IPC) for acute malnutrition has been conducted as part of the Short Rains Assessment (SRA). The analysis shows the nutrition situation is stable across the Arid and Semi-Arid (ASAL) areas though still critical in some counties as seen in the 2018 long rains assessment ((Figure 3.1). Turkana, Samburu and Mandera counties as well as East Pokot and North Horr sub-counties have remained at critical level (Phase 4; GAM WHZ 15.0 - 29.9 percent) while Wajir, Tana River, West Pokot, Garissa and Laisamis counties are at serious level (Phase 3; GAM WHZ 10.0 -14.9 percent). Isiolo, Saku and Moyale are classified as alert (Phase 2; GAM WHZ ≥ 5 to 9.9 percent) while Laikipia, Kitui, Kajiado, Taita Taveta, Kilifi, Kwale and Lamu are at acceptable level (Phase 1; GAM WHZ <5 percent) – Figure 3.2. Nutrition situation is likely to remain stable across the areas during the projection period except for Wajir-Pastoral and Tana River which are likely to deteriorate to critical and Isiolo to serious phase respectively (Figure 3.3).

The negative effects of the below average 2018 short rains were offset by the positive impacts of the 2018 long rains which resulted in substantial regeneration of pasture, improved crop production and subsequently improved food and nutrition security situation. As a result, stable food prices and access to markets, favorable terms of trade, reasonable milk availability in pastoral and agro-pastoral areas and food stocks in agricultural areas were recorded during the period under review. However, poor child feeding and care practices, low level of maternal education, reliance on rain fed agriculture and livestock production, and poor access to health care services continue to negatively impact health and nutrition situation especially in the arid counties. While the nutrition situation is projected to remain stable in most areas, there is potential for fast deterioration should the 2019 long rains performance be poor. A summary of contributory factors is presented in annex 6.

The estimated number of children 6 to 59 months requiring treatment of acute malnutrition is 541,309 (severe acute malnutrition 113,941 and moderate acute malnutrition 427,368) with more increase observed in severe acute malnutrition (SAM) caseloads (Table 3.1 and Figure 3.4). The increase was mainly informed by the review and consideration of SAM program admissions where over achievement of SAM program admission was recorded surpassing the targets for 2018 despite modest coverages being observed during coverage assessments. The capacity of the health system has been improving over the past several years in relation to continued recruitment of health workers, increasing number of health facilities and improved delivery of commodities directly to health facilities. Hence several counties surpassed their respective targets, and in some cases the estimated total caseload leading to adjustment of estimates to fit to the actual admissions observed. The estimated number of pregnant lactating women (PLW) requiring treatment of acute malnutrition is 30,712. Mandera County reported the highest number of total caseloads.

Table 3.1: Summary of total caseload and targets, February 2019

County	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	472,756	259,313	91,740	68,805	381,017	190,508	27,959	27,959
Urban	68,552	39,826	22,201	16,651	46,351	23,176	2,752	2,752
Grand Total	**541,308**	**299,139**	**113,941**	**85,455**	**427,368**	**213,684**	**30,712**	**30,712**

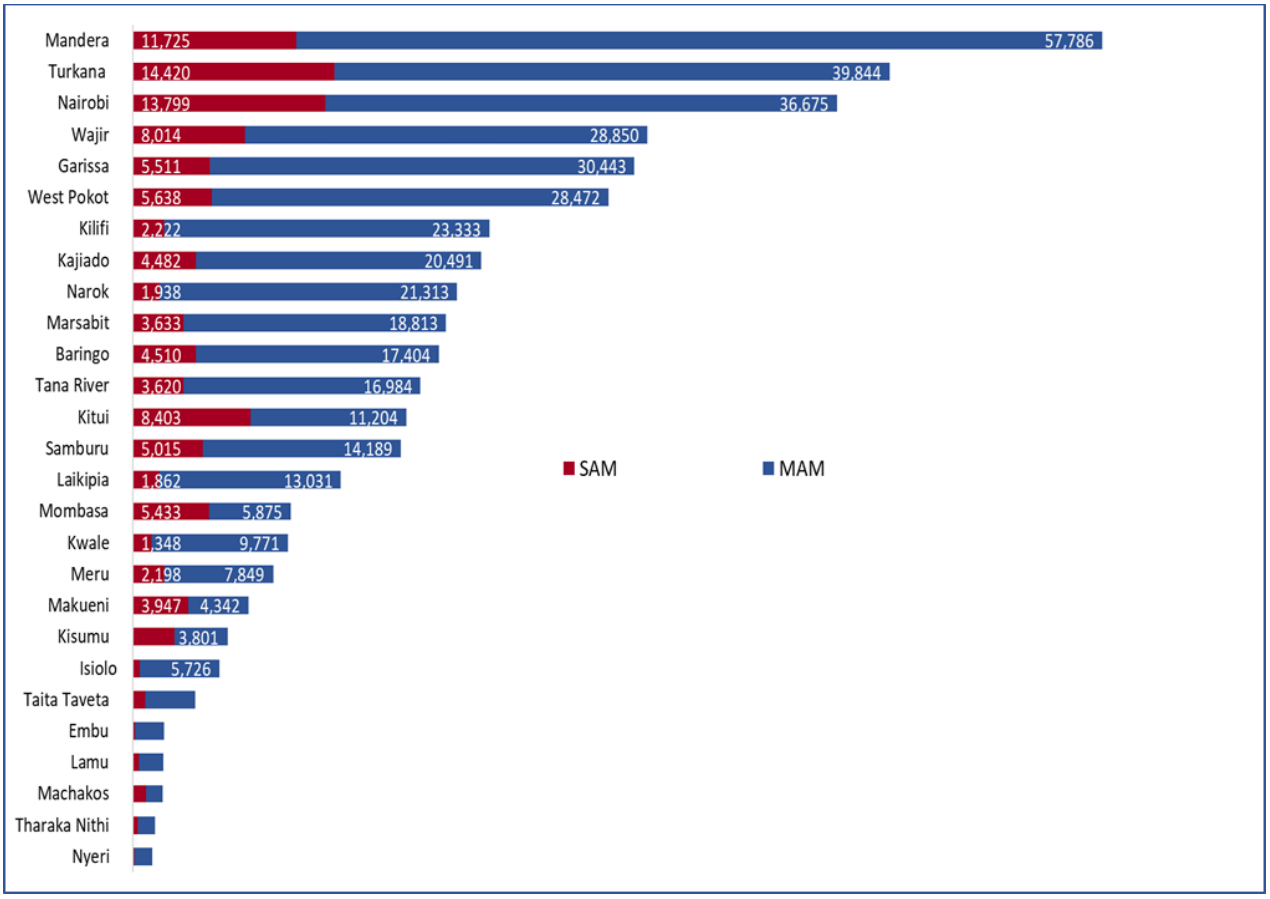


Figure 3.4: Estimated Caseloads for MAM and SAM

3.2 Integrated management of acute malnutrition program coverage

Admission trends to the integrated management of acute malnutrition (IMAM) program in 2018 is comparable to the trends observed in 2017 despite a generally better seasonal performance in 2018 compared to 2017 which was a drought year (Figures 3.5 and 3.6). A total of 72,422 severely malnourished children (113.5 percent of the annual target of 63,829) and 135,877 moderately malnourished children (64 per cent of the annual target of 212,744) were admitted for treatment from January to December 2018 in urban and ASAL areas indicating that annual target for children

requiring treatment of SAM has been met. This is mainly attributed to increased reporting of beneficiaries and improved supply chain management following scale up of Logistic Management Information System trainings.

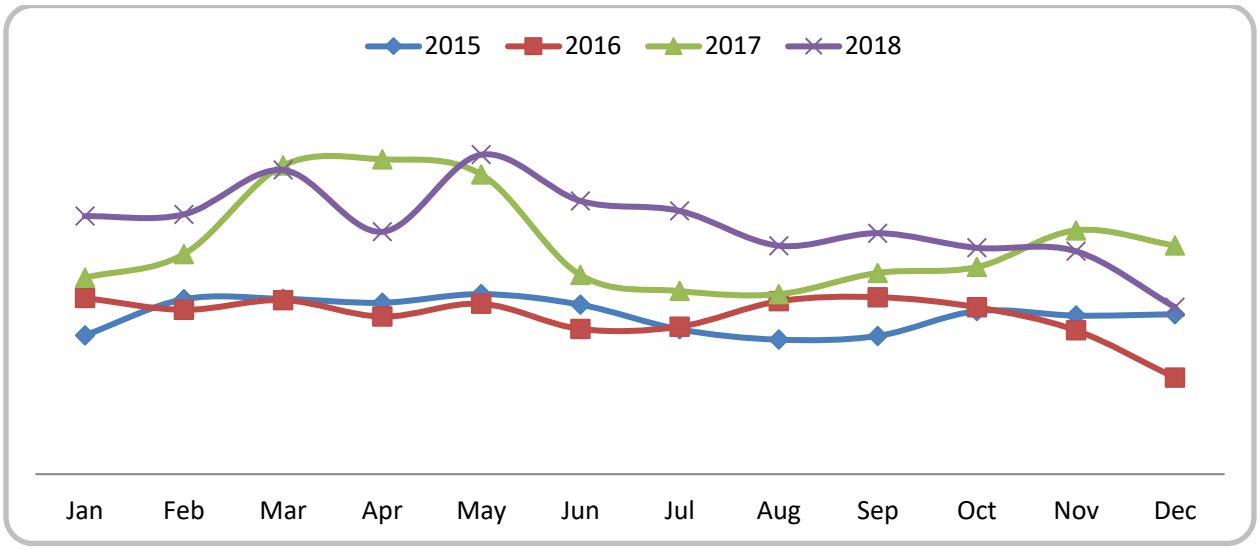


Figure 3.5: Trends in total admissions, SAM, ASAL and urban

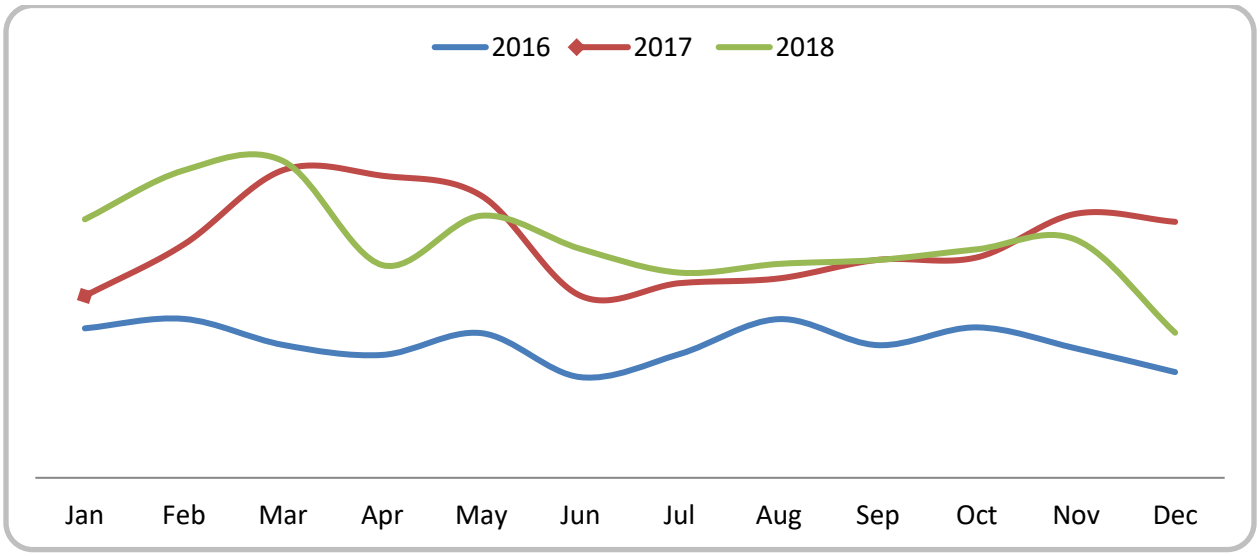


Figure 3.6: Trends in total admissions, MAM, ASAL and urban

3.3 Key Recommendations

- Closely monitor the performance of the 2019 long rains, update the nutrition situation projected if needed - for timely program adjustment and scale up should the rains perform poorly
- Update contingency and response plans including response to current outbreaks
- Continued implementation of the high impact health and nutrition interventions with focused effort to improve coverages in counties with inadequate coverages

- Closely monitor implementation of the detailed recommendations provided in the full nutrition situation report
- Scale up current levels of health and nutrition interventions in Wajir and Tana river counties to mitigate the effects of the projected deterioration
- Close monitoring of IMAM program admissions versus targets at health facility and community level to better inform program targeting

3.3 Factors to Monitor:

- The performance of 2019 long rains given the poor performance of the 2018 short rains
- High malnutrition levels in selected counties with GAM WHZ ≥15 percent

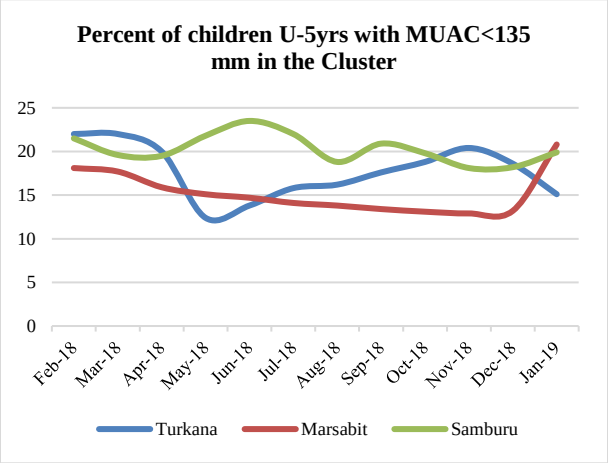
3.5 Cluster Nutrition Situation

3.5.1 Pastoral North West (Marsabit, Turkana and Samburu Counties)

Nutrition Situation

The nutrition situation was reported to remain the same in the cluster, with all Turkana, Samburu and North Horr in Marsabit County remaining at Critical (IPC AMN phase 4), Laisamis in serious phase (IPC AMN phase 3) and Moyale and Saku in Alert (IPC AMN phase 2) . Despite the total failure in the performance of the short rains, the stability is mainly attributed to the stable food security situation, a spillover from the good performance of the 2018 long rains. The biggest challenge remains; sustaining the gains as the counties are still highly vulnerable and prone to shocks despite a lot of effort to build resilience of the most affected communities. All the counties were classified in stressed Food Insecurity (IPC for food insecurity Phase 2) although in Turkana a significant number of households in the pastoral areas are facing Crisis (IPC phase 3) outcomes while in Marsabit County some are classified in None/Minimal (IPC Phase 1). During the period July to December 2018, the proportion of children with mid upper arm circumference (MUAC) less than 135mm showed an upward trend in Samburu and Marsabit, while it showed an downward trend in Turkana (Figures 3.7 and 3.8).

A three-month projection of the nutrition situation from March to May 2019, based on historical data analysis indicates the nutrition situation across the cluster will likely remain stable.



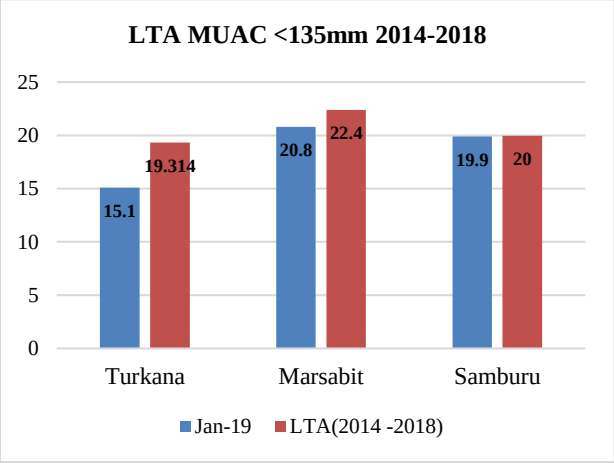


Figure: 3.7: Proportion of Children with MUAC <135mm ***Figure: 3.8 LTA MUAC <135mm***

Dietary intake

Majority of the households across the cluster were within the borderline and acceptable consumption scores except the pastoral household of Turkana whose poor consumption score was 37.5 percent (Figure 3.9). The pastoral households were consuming 1- 2 meals per day, while the agro pastoral households were consuming 2 -3 meals per day which was typically normal and comprised of cereals, oil, milk and vegetables across the cluster. In Marsabit 79.1 and 68.1 percent of the households in the agro pastoral and pastoral livelihood zones had acceptable food consumption scores respectively in January 2019 an increase compared to 54.4 and 67.9 percent in the same period in 2018. In Samburu the proportion of households in pastoral zone with poor, borderline and acceptable food consumption were 8, 44 and 48 percent respectively while in Agro-pastoral 42.1 and 57.9 percent had borderline and acceptable food consumption respectively with

no households in the poor category. In Turkana the pastoral livelihood zone in January reported the proportion of households having poor, borderline and acceptable food consumption scores were 37.5, 45.5 and 17 percent respectively while in the agro-pastoral livelihood zone, there were 8.3, 25 and 66.7 percent with poor, borderline and acceptable food consumption scores. In the fishing livelihood zone, households with poor, borderline and acceptable food consumption scores were 19.3, 47.7 and 33 percent respectively. The number of meals consumed in the pastoral livelihood zone is 1-2 meals per day and is normal for this time of the year. In the agro-pastoral and the fisheries livelihood consume 2-3 meals per day and is considered normal for this time of the year.

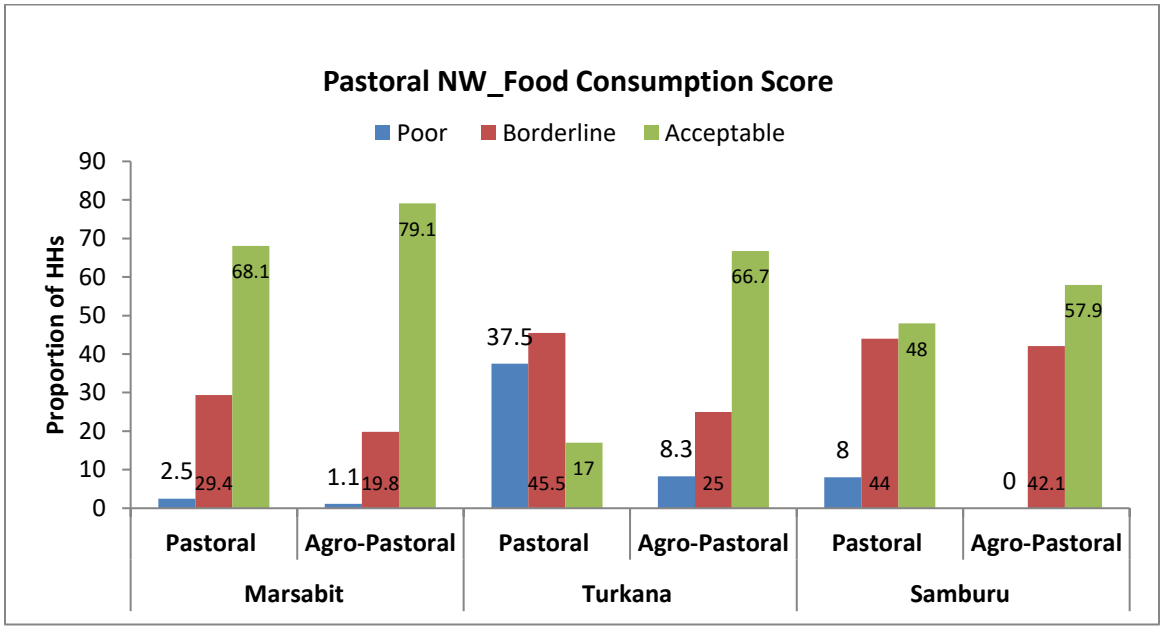


Figure 3.9: Food Consumption Score in the Cluster Livelihoods

Morbidity and Mortality

Morbidity trends for general population and children under five years across the cluster were within the seasonal norms for the three diseases (Malaria, diarrhea and URTIs) except in Marsabit which recorded increased URTIs compared to the same period in 2017 attributed to cold weather experienced during the short rains season. Prevalence of diarrhea during the period under review in Marsabit was associated with poor water, sanitation and hygiene practices across the county and perennial conflict witnessed along the border limiting access to water. In July to December 2018, there have been increased cases of Dysentery, Diarrhea and Typhoid by 16, 67 and 37 percent respectively compared to a similar period in 2017 in Marsabit. The increased prevalence was associated with contaminated open water sources during the short rains season as well as the continued practice of open defecation leading to contamination of water sources. The cluster counties did not experience disease outbreak during the period under review. There were no unusual deaths reported in the cluster.

Child care practices

Sub optimal child care practices have a direct impact on acute malnutrition as they affect growth and render children susceptible to diseases and acute malnutrition (and stunting). The child care and feeding practices remained sub-optimal just like the previous seasons. Analysis of the care

practices for children 6-23 months shows that Minimum Acceptable Diet (MAD) was low across the cluster with Samburu, Marsabit and Turkana having MAD of 25.7 percent, 15.6 percent and 19.5 percent respectively. The Minimum Dietary Diversity (MDD) was 59.6 percent 46.7 percent, and 46.6 percent, while Minimum Meal Frequency (MMF) was 35.9 percent, 48.5 percent and 33 percent in Samburu, Marsabit and Turkana counties respectively. This is an indication that poor MAD still affects nutritional outcomes of children since it remains low across the cluster. Introduction of solid and semi-solid foods is generally poor across the cluster with Marsabit, Samburu and Turkana having 44 percent, 46 percent and 36 percent respectively. This can negatively affect nutrition outcomes due to inadequate dietary intake. Exclusive breastfeeding was common in all counties with above 70 percent prevalence across the cluster. Poor water sanitation and hygiene practices across the cluster contribute to high morbidity of diarrheal diseases, high treatment cost (time and money) and more time spent in search of water hence affecting optimal child care and feeding practices which have a major contribution on acute malnutrition.

Immunization and Vitamin A Supplementation

Routine Immunization coverage in the analysis period greatly improved compared to the same period in 2017 with Turkana and Marsabit reaching above the national target of 80 percent in the proportion of children fully immunized, receiving OPV3 antigen and vaccinated against measles (Figure 3.10). The 2017 immunization coverage across the cluster was affected by prolonged health care workers strike during the same year, 2017. The improvement in July to December 2018 is attributed to accelerated Malezi Bora campaign and integrated medical outreaches in the hard to reach areas. However, Samburu County is still below the national target of 80 percent in the proportion of children fully immunized (65.3%) and vaccinated against measles (74.5 percent), with only OPV3 coverage above the national target at 92.2 percent.

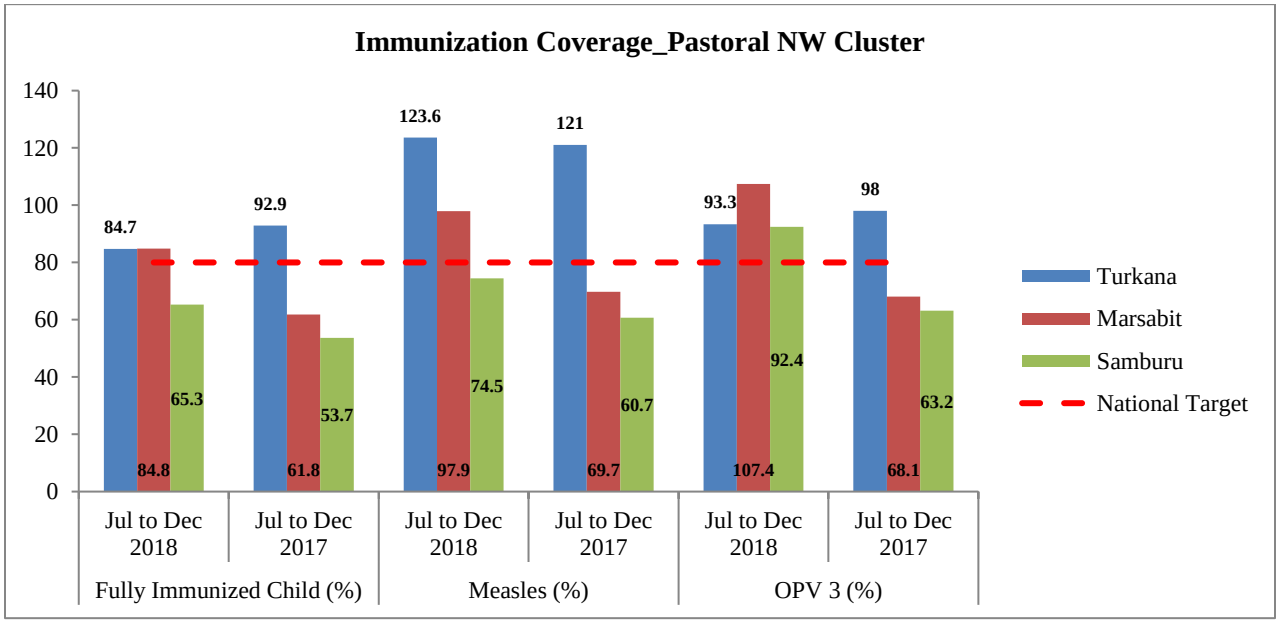


Figure 3.10: Immunization Coverage in Pastoral NW Cluster Counties

There was a notable improvement in Vitamin A Supplementation coverage from July to December 2018 compared to similar period in 2017 with VAS coverage for children aged 6 to 59 months at

83.3 and 82.0 percent in Marsabit and Samburu Counties respectively (Figure 3.11). Vitamin A supplementation coverage in 2018 improved due to the accelerated activities during the Malezi bora month in November 2018 and institutionalization of Vitamin A supplementation in the ECD centers. In Marsabit, the improvement in immunization and VAS coverage is attributed to increased workforce recruited by the county government (75 nutritionists and 160 community health assistants) who improved health services delivery at the community level and partners support. However, this is not the case in Turkana County whose VAS coverage for children aged 6 to 59 months was 50 percent, below the national target of 80 percent. This is attributed to pulling out of partners who previously were supporting integrated medical outreaches in the county. In addition, some households had moved away as they migrated with their animals to the neighboring border countries and thus could not be reached.

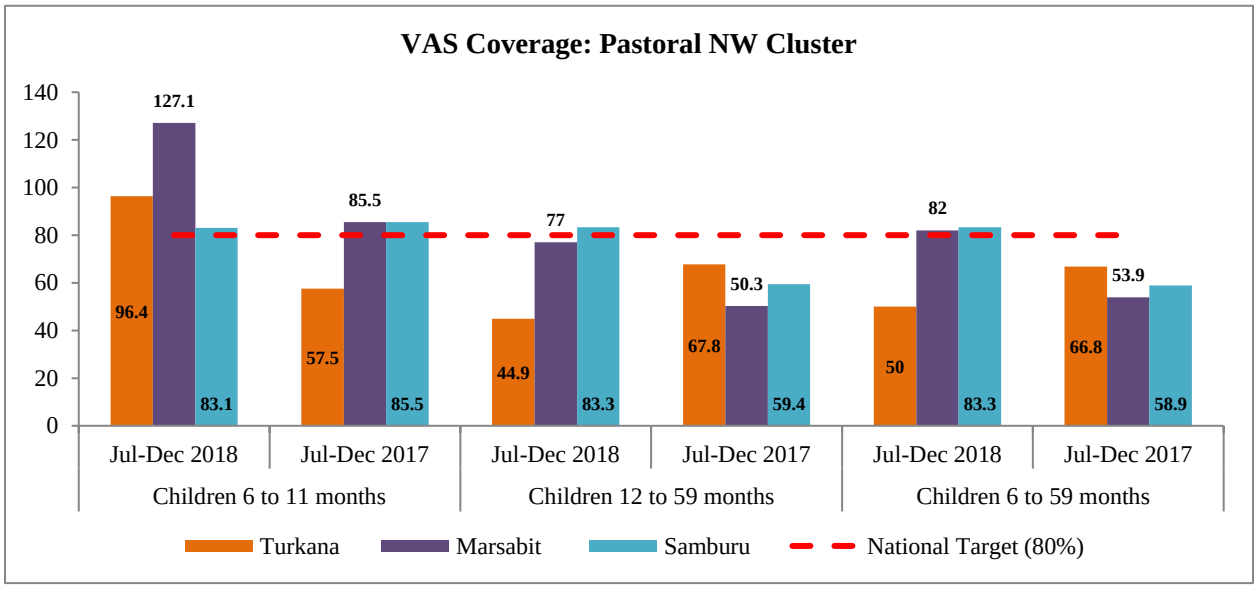


Figure 3.11: Immunization Coverage in Pastoral NW Cluster Counties

Water Hygiene and Sanitation (WASH)

Currently, a bigger proportion of the households in the cluster do not have access to clean water with only 38.5, 44.9 and 30.5 percent in Samburu, Turkana and Marsabit respectively. Water treatment was found to be done by only 20.0, 20.1 and 30.5 percent households in Samburu, Turkana and Marsabit respectively, majorly using chemical. Notable improvement in Turkana and Marsabit is attributed to increased awareness on WASH practices and support by county government and other partners (NDMA January 2019 bulletin). **In Samburu, the current** per capita water consumption in pastoral and agro-pastoral livelihood zones is 10 and 15 litres per person per day which is below normal in both livelihood zones though consumption in the pastoral zone is below the SPHERE standards. Latrine coverage stood at 38.0 and 30.0 percent in the agro-pastoral (Samburu west) and pastoral zones (Samburu East and North Sub-counties) respectively implying that 7 in 10 members of the population practice open defecation, which is a source of contamination of water sources (DHIS2). Latrine coverage in Turkana and Marsabit stood at 19.7 and 52.0 percent respectively. Hand washing practices at four critical times was very poor being practiced by only 26.0, 15 and 26.3 percent of the population in Samburu, Turkana and Marsabit respectively. The poor hygiene practices and use of unsafe water is a pointer to the sustained

significant number of cases of diarrhoea disease among the children below five years and general population although t**here was no outbreak of water borne diseases during the period under review.** The limited access to sanitation facilities in the cluster was a result of frequent mobility of most households and limited behavior change towards acquiring and use of these facilities.

Basic/structural/capitals

The counties in the cluster experience cyclic and erratic weather patterns hence it is hit by recurrent shocks such as drought that affect food security. Insecurity arising from tribal clashes, has negative impact on nutrition with communities being forced to flee to safety and poor infrastructure, poverty, low literacy levels and retrogressive cultures in the cluster inhibit uptake of modern MIYCN interventions. Coupled with high maternal work load, these challenges are impediments to optimal child care. These too affects child feeding practices, health seeking behavior and low purchasing power of various foods. Poor infrastructure is a hindrance to market accessibility resulting to some areas not able to be supplied with vegetables and fruits that are rarely consumed. The areas are vast with few health facilities serving a large population. Limited budgetary allocation to health, limited human resource in the health sector and no clear budget line for nutrition activities continue to negatively affect the implementation of life saving nutrition interventions in the cluster counties.

Recommendations

Immediate/Short term

- Update contingency and response plans as part of early warning early action.
- Capacity development of staff through On Job Training and Continues Medical Educations (CMEs)
- Improve awareness and campaigns on proper hygiene and emphasis on use of sanitation facilities in areas that are most affected by WASH situation
- Enhance household sensitization on embracing food diversification and its importance.
- Empower the current community health strategy since this form a main avenue of child information for mothers.
- Continued MIYCN sensitization focusing on the importance of optimal meal frequency among children and the women of reproductive age as well as on dietary diversity
- Enhance male involvement since they are household budget holders at community level child health and nutrition sensitization
- Scale up nutrition education and counselling for improved maternal, infant, and young child feeding behaviours and practices.
- Strengthen access to service through integrated outreach programs as malnutrition levels have remained high.
- Strengthen community referral mechanism for acutely malnourished children, defaulter tracing mechanism and community health units

- Strengthen coverage of ongoing high impact nutrition interventions as informed by mapping and gap assessment
- Review surge support mechanisms through existing partnerships to ensure services continue and utilization of early warning information in triggering response
- Establish and strengthen surge support and monitoring at sub-county and cluster level and regular review of the surge board
- Enhance community dialogues as a strategy to promote good practices and strengthening community ownership for community strategy and health systems support
- Scale up and integration of micro nutrient powders program
- Scale up of cooking demonstrations through the BFCI roll out using the mother to mother support groups
- Scale up IMAM surge as part of nutrition surveillance and capacity response

Medium to Long term

- Continued nutrition capacity strengthening for improved health and nutrition service delivery
- Strengthen the existing community health strategy since CHVs were a main source of information on child care practices for the mothers. Reactivating non-functional CUs across the cluster to enhance community nutrition linkages
- Promote and strengthen already existing multi-sectoral engagement and collaboration to ensure coordinated efforts and synergy to address acute malnutrition.
- Include nutrition outcomes for under-fives as a core indicator in programs on agriculture, water and sanitation, education and food security and social protection
- Strengthening BFCI in community units and mother support groups to increase awareness of appropriate complementary feeding
- Integrate food security with agricultural sectors to nutrition sector, enhance food and nutrition security among households in the agro-pastoral areas
- Capacity building among caregivers with low socio-economic status to improve living standards and boost purchasing power
- To collaborate with food security and come up with recommendations for budget allocation to nutrition needs at county level
- Provide community-based support to build common latrines and discourage open defecation
- To improve road network especially to access markets and hospitals
- Sensitization campaigns to promote importance of education at all levels
- Lobbying and advocating for use of nutrition insecurity vulnerability in targeting access to social protection safety nets across the cluster
- Promote household food security through supporting women empowerment by implementing capacity strengthening on entrepreneurship and business skills including

scale up of viable business models to increase the ability of women to engage in profitable businesses

3.5.2 Pastoral North-East Cluster (Wajir, Mandera, Garissa, Isiolo, Tana River)

Nutrition Situation

The counties of Mandera, Isiolo, Garissa, Tana River, Wajir constitute the pastoral north east cluster. Compared to the previous year's nutrition situation in 2019 has improved for Mandera and Isiolo. Whereas, the situation for Wajir and Tana River has almost remained the same (Figure 3.12). While in Wajir it has increased slightly.

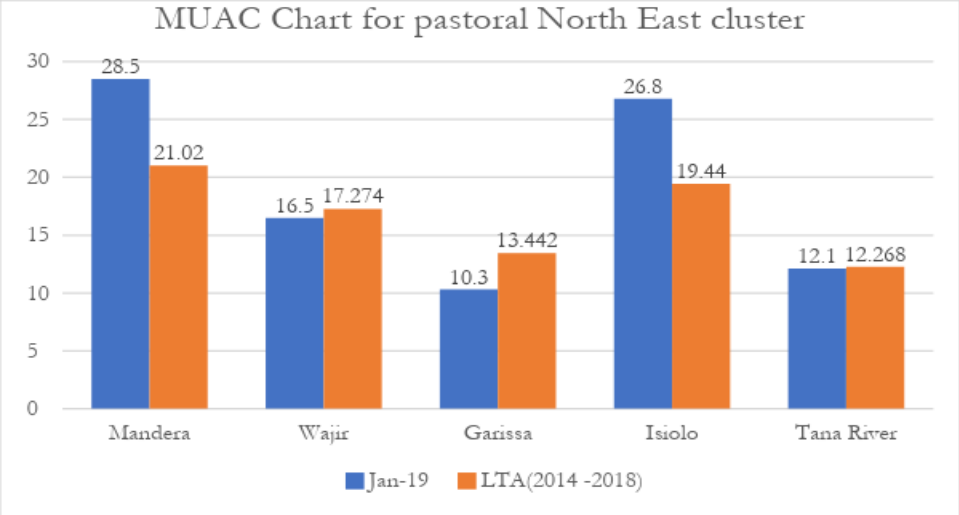


Figure 3.12: Comparison of MUAC prevalence between 2019 and the previous years

The current phase classification for Garissa for acute malnutrition situation is at phase 2 and is expected to deteriorate but remain within the same phase into the projection period. In Tana River County the current situation is at phase 3 (GAM WHZ 14.8 percent) and is expected to deteriorate to phase 4 into the projection phase. In Mandera current phase is serious (4) and expected to remain in the same phase. Isiolo was in phase 2 (alert) but expected to deteriorate to phase 3. Wajir agro-pastoral is currently in phase 3 and is expected to remain in the same phase, whereas, Wajir pastoral is currently in phase 3 and is expected to deteriorate to phase 4 over the projection period.

A three-month projection of the nutrition situation from March to May 2019, based on historical data analysis indicates the food security situation will likely deteriorate. For example, Tana River is expected to deteriorate due to declining food security indicators, water scarcity and deterioration of animal body condition and unfavorable terms of trade. The county experienced lower than normal rains which affected crops performance resulting to poor harvest and low household stocks. The county is currently relying on markets for staples at higher than normal prices. The unfavorable rains resulted to depletion of rangelands earlier than normal with scarcity of pasture, water and milk.

Dietary intake

Dietary diversity remains normal across the cluster with most Households consuming an average of 2-3 meals in a day. This is common for both adults and children below five years. Analysis of foods mostly consumed in the cluster during the analysis period indicated cereals and cereal products, milk and milk products and pulses were the most consumed foods. Minimum Dietary Diversity (MDD) score across the cluster was less than 40 percent. Various sources of data across the cluster indicated that Food Consumption Score (FCS) was above 70 percent when combining borderline and acceptable levels. Isiolo recorded the highest of 99 percent.

Morbidity and Mortality

The prevalence of Accute respiratory infection (ARI) was high across the cluster with more than 50 percent, but notably higher in Marsabit at 64.0 percent. Across the cluster the highest caseloads are for diarrhea (Figure 3.13).

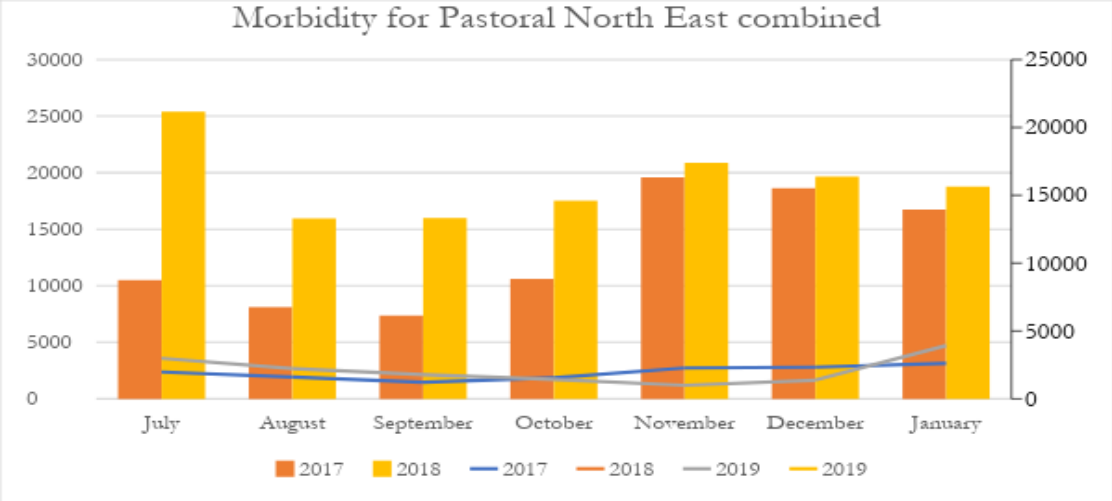


Figure 3.13: Morbidity for Pastoral North East cluster

Child care practices

There is variation in different child care indicators across the cluster. Exclusive breast-feeding prevalence (EBF) was highest in Isiolo and Mandera and lowest in Garissa and Tana River (Figure 3.15). Isiolo and Tana River had the highest prevalence of continued breastfeeding at 2 years. Garissa had the worst prevalence of timely introduction of complementary foods. The variations could be explained by diversity in ethnicities across the cluster. The need for continued behavior change communication is justified.

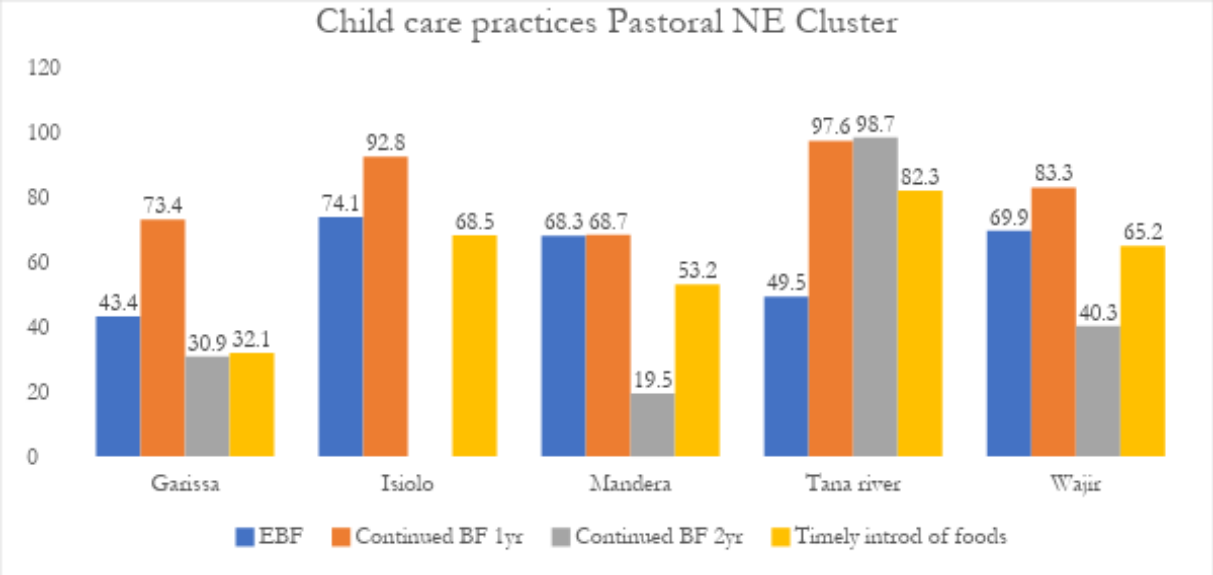


Figure 3.14: Child care practices in Pastoral North East cluster

Immunization, Vitamin A supplementation, IFAS coverage and Deworming.
Immunization coverage measles and polio data has variations across the sector. Isiolo had the highest overage while Mandera had the lowest. Polio vaccination coverage was fairly high across all the cluster counties except Mandera which recorded the lowest (Figure 3.15).

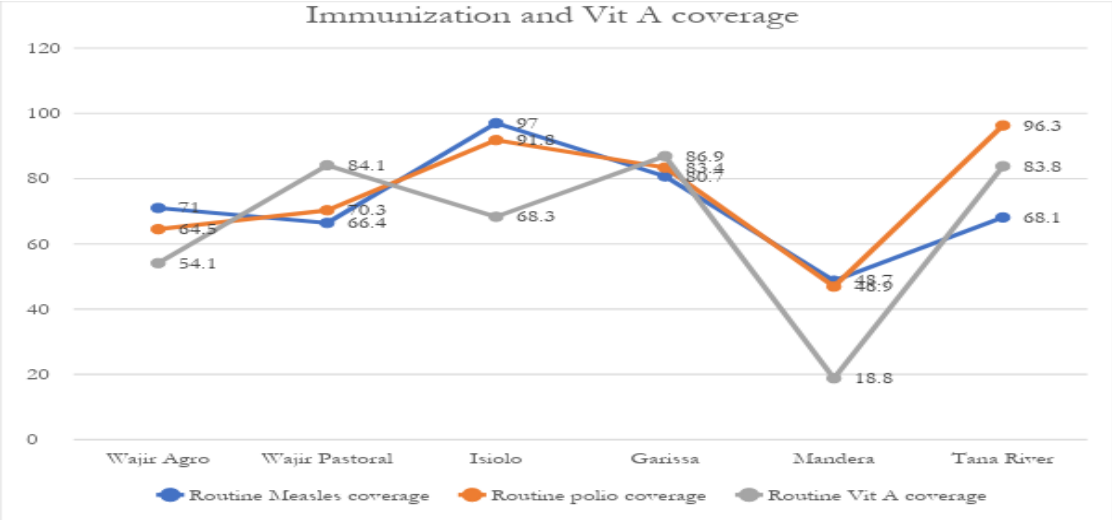


Figure 3.15: Measles polio and vitamin A routine coverage for NE Pastoral cluster.

Vitamin A routine coverage was highest in Garissa at 86.9 percent, but lowest in Mandera at 18.8 percent. Overall, for the NE Pastoral cluster, Mandera County performed poorly across the three indicators.

Water Hygiene and Sanitation (WASH)

Isiolo has the highest prevalence of access to improved sanitation across the cluster. The lowest coverage is in Wajir pastoral (Figure 3.16).

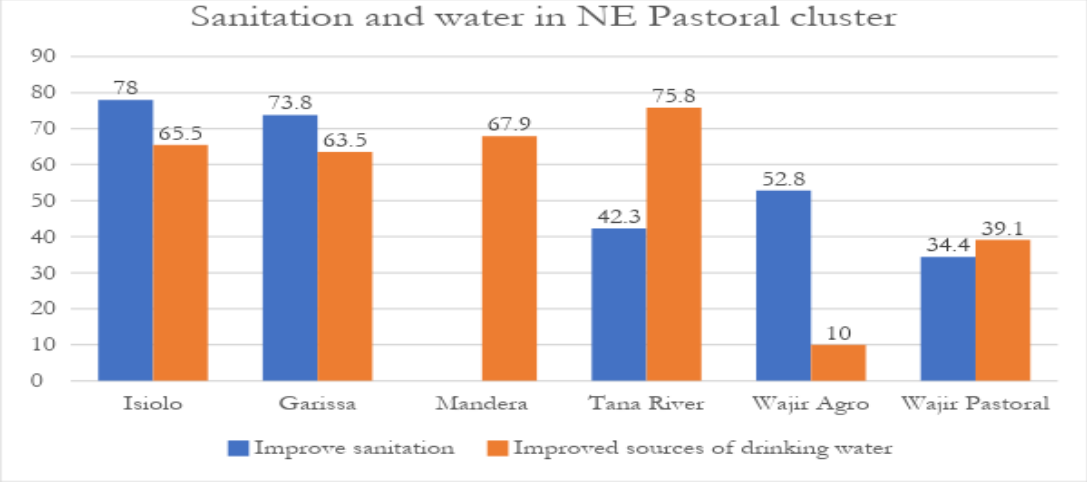


Figure 3.16: Coverage of improved sanitation and access to improved sources of drinking water in NE Pastoral cluster

Access to improved sources of drinking water was highest in Tana River and lowest in Wajir agro-pastoral areas of analysis.

Basic/structural/capitals

All the North East pastoral cluster counties report all the capitals (human, natural, financial, physical and social capitals) as major determinants of acute malnutrition outcomes.

Recommendations

Immediate

- Active case finding and screening mass screening exercises in hot spots as part of situation monitoring
- Review/update of contingency and response plans
- Review surge support mechanisms through existing partnerships to ensure services continue and utilization of early warning information in triggering response
- Enhance community dialogues as a strategy to promote good practices and strengthening community ownership for community strategy and health systems support
- Scale up and integration of micro nutrient powders program
- Scale up of cooking demonstrations through the BFCI roll out using the mother to mother support groups
- Scale up community sensitization and provision of water treatment chemicals

Medium to Long term

- Scale up roll out of Baby Friendly Community Initiative

- Establishing/strengthening and reactivating non-functional CUs across the county to enhance community nutrition linkages
- Lobbying and advocating for use of nutrition insecurity vulnerability in targeting access to social protection safety nets across the cluster
- Promote household food security through supporting women empowerment by implementing capacity strengthening on entrepreneurship and business skills including scale up of viable business models to increase the ability of women to engage in profitable businesses.

3.5.3: Agro-Pastoral Cluster (West Pokot, Narok, Kajiado, East Pokot, Kieni (Nyeri North), Laikipia)

Nutrition Situation

The nutrition situation within the Agro Pastoral cluster varies by counties. Baringo and West Pokot counties are in phase 4 and 3 respectively while Kajiado and Laikipia are in phase one. There is a notable improvement in nutrition situation in Laikipia and Kajiado Counties during this period of analysis, with an IPC AMN Phase 1 based on NDMA sentinel sites data. This improvement is attributed to consumption of acceptable diets by households owing to improvements in general food security situation. Based on the performance of the 2018 short rains and other contributing factors in the IPC AMN analysis, the nutrition situation is most likely to remain the same within the projection period. The nutrition situation in Baringo and West Pokot is expected to remain stable in phase 4 (Critical) and 3 (Serious) respectively in the projection period due to below average short rains, poor health, poor child care practices, and poor sanitation services. There is an increase in milk production, yet prices are beginning to increase showing a slight deterioration in the overall food security situation in some of the counties. With the onset of the long rains that are expected to start at the end of March, it is likely the counties will remain in the same IPC AMN classification phase. Figure 3.17 shows MUAC trends across the cluster.

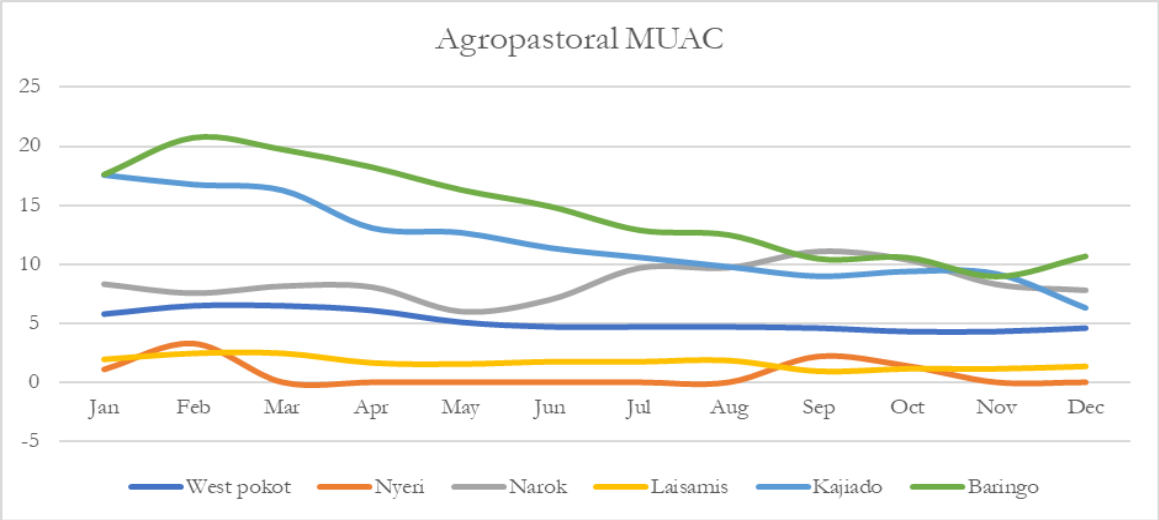


Figure 3.17: Agro-Pastoral MUAC Trends

Dietary Intake

According to the 2019 food security SRA report, there has been an improvement in food consumption scores; with majority of the population moving from poor and borderline to acceptable food consumption scores compared to 2017 (Figure 3.18). Narok County reported the highest number of households (91 percent) with acceptable food consumption scores and only 8 percent of households were borderline. Nyeri recorded the lowest number of households (59.5 percent) showing food consumption score within the acceptable range. Baringo County reported an increase with 88.3 percent of households having acceptable food consumption score as compared to 61 percent reported in the same period in 2017. West Pokot reported the most households with poor food consumption scores at 13 percent while Nyeri had the most households with borderline consumption scores at 38 percent. Most of the households from across the cluster employed normal copying strategies in accessing food except Baringo County which recorded the highest average coping strategy index score of 13, though a decrease from 15.74 reported in the same season in 2017.

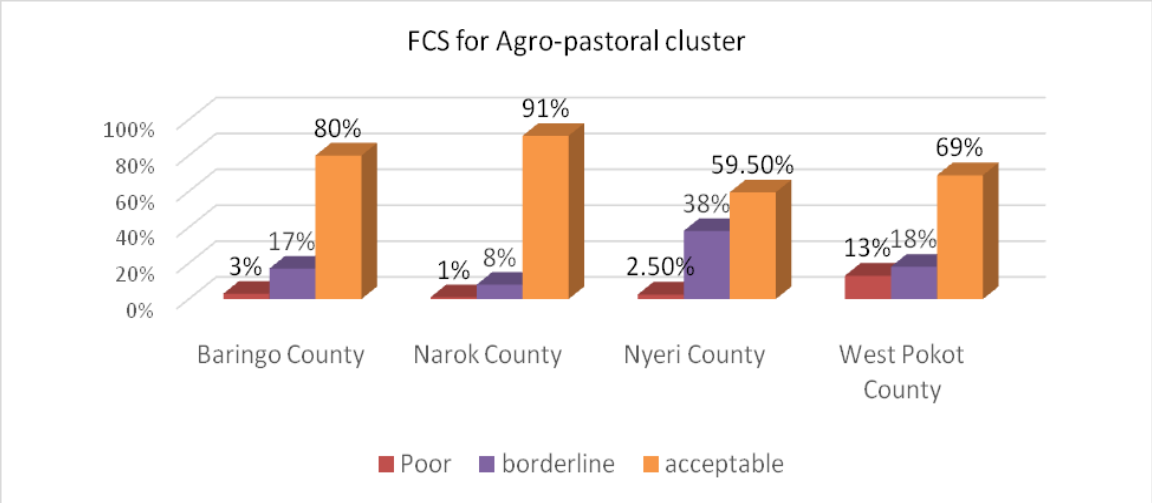


Figure 3.18: Agro-Pastoral Food Consumption Score (FCS)

Morbidity

There was a notable increase in cases of diarrhoea and dysentery for children under five (Figure 3.19) as compared to the same season in 2017 across the 4 counties (West Pokot, Narok, Laikipia, and Kajiado). The increases could be attributed to limited access to water, hygiene and sanitation facilities. It could also be attributed to improved health seeking behaviours as there was increased outreach into communities by Community Health Workers. For all other morbidities, the counties saw decreases in the overall caseload. Baringo saw decreases in the caseloads for all four diseases (URTI, diarrhoea, malaria and dysentery) in 2018. In regard to malaria morbidity, West Pokot and Kajiado also saw decreases in the total number of cases in 2018 as compared to 2017 in the same season. On the other hand, Narok saw increases of malaria during 2018. There were also cases of Hepatitis B reported in West Pokot and Baringo counties. Cholera outbreaks were reported in Narok (Narok North, Narok South, Narok East) and Kajiado counties with a total of 172 confirmed cases in Narok county and 58 confirmed cases in Kajiado. The majority of cases occurred in Narok South (119 cases). Water borne diseases are expected to increase with the onset of the long rains.

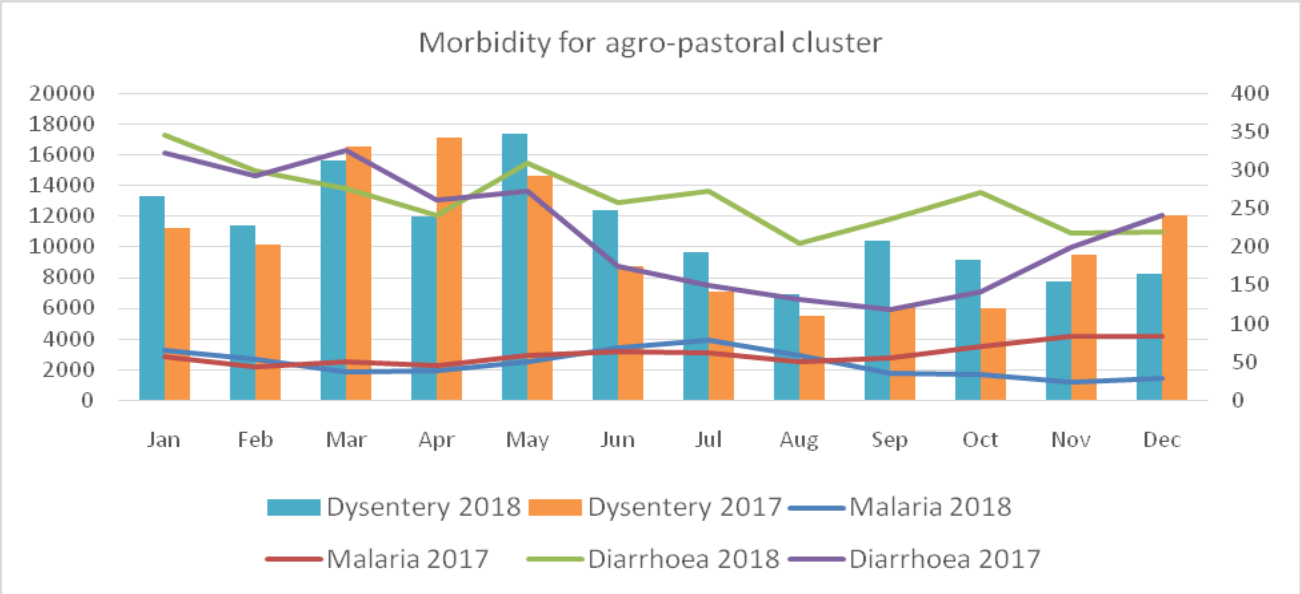


Figure 3.19: Agro-Pastoral Cluster Morbidity Trends

Child Care Practices

Meal frequency was reported to be 2-3 meals across all livelihood zones in Baringo, Narok, and Laikipia. West Pokot saw 1-2 meals consumed per day in the pastoral livelihood zone and 2-3 meals consumed per day in the mixed and agro pastoral zones. Most households across the livelihoods consumed at least a staple and a vegetable daily complemented by frequent consumption of oil and pulses due to relative market stability. Milk and greens were reported to be available though prices for milk were increasing in West Pokot and Narok.

Exclusive breastfeeding is rarely practiced across all livelihood zones both in the pastoral and mixed farming zones. Early introduction of complementary food before the recommended six months is common in these communities which is attributed to cultural practices as well as high maternal workload. Some communities in the cluster believe in pre-lacteal feeds which interfere with exclusive breastfeeding, increasing the risk of acute malnutrition among infants and young children.

Immunization and Vitamin A Supplementation

For the most part, coverage for both immunizations and Vitamin A supplementation increased across the six countries as seen in Figure 3.20. Kajiado County, Laikipia County, and Nyeri County met the Vitamin A Supplementation national target of 80 percent with 82.3 percent, 83.1 percent and 81.1 percent coverage respectively. Baringo County and West Pokot County saw significant improvement in coverage from 2017 to 2018, from 56.4 percent to 69 percent and 11 percent to 70.9 percent. This is likely due to Vitamin A campaigns carried out in October 2018. The only county that did not see any improvement was Narok County whose Vitamin A coverage stayed around 25 percent in both 2017 and 2018.

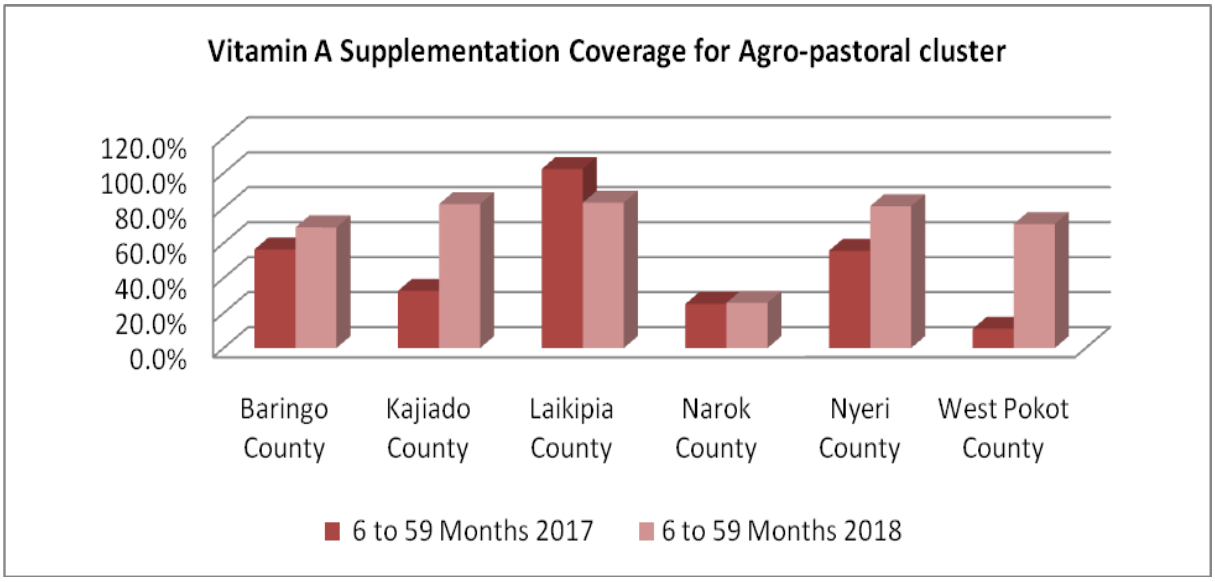


Figure 3.20: Agro-Pastoral Cluster Vitamin A Supplementation Coverage

The six counties largely saw increases in immunization coverage in 2018 as compared to 2017. Only Laikipa and Nyeri saw decreases in their immunization coverage. Laikipa saw slight decreases, whereas Nyeri saw much larger decreases with its full immunization dropping from 85.6 percent to 73 percent, OPV3 coverage dropping from 85.3 percent to 70.9 percent, and measles coverage dropping from 90.4 percent to 74.1 percent (Table 5). The only county that met national immunization targets was Kajiado County with 85.6 percent fully immunized, 88.7 percent OPV3 coverage, and 88.2 percent measles coverage. Immunization coverage continues to be the lowest in Baringo County with 51 percent OPV3 coverage, 49.4 percent measles coverage, and 39.5 percent fully immunized (Figure 3.21).

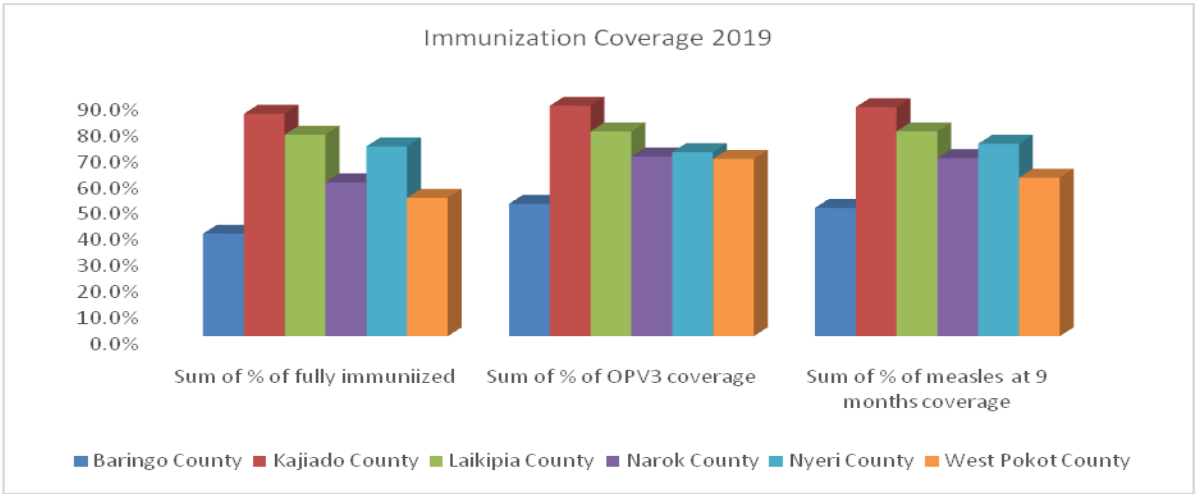


Figure 3.21: Agro-Pastoral Cluster Immunization Coverage

Water Hygiene and Sanitation (WASH)

In general, the main source of water for the cluster was surface water with an average of 64 percent for Baringo East, Laikipai, West Pokot and Narok. Laikipai County had the highest population using unprotected sources of water at 86 percent. In Kajiado, 63.3 percent of the households drew water from protected sources. A third of the population across the cluster treated water before drinking with Narok having the lowest at 21.3 percent.

Hand washing practices remains low across the cluster except for Laikipai County which reported a higher proportion (65 percent) of the population appropriately washing hands at four critical points. Narok County had the lowest hand washing practices with only 1.7 percent of population washing hands at four critical times (Figure 3.22). In Baringo, West Pokot and Kajiado, hand washing at four critical times was reported to be 3.1 percent, 7 percent and 16.3 percent respectively. Proper household human waste disposal was noted to be highest in Laikipia with a latrine coverage of 72 percent. However, the lowest latrine coverage was in Baringo County at 6.6 percent while Kajiado, Narok and West Pokot had a latrine coverage of 40.8 percent, 42.4 percent and 49 percent respectively (Figure 6). The poor water, hygiene and sanitation practices in the cluster greatly contribute to high water borne diseases including cholera, which ultimately contributes to acute malnutrition.

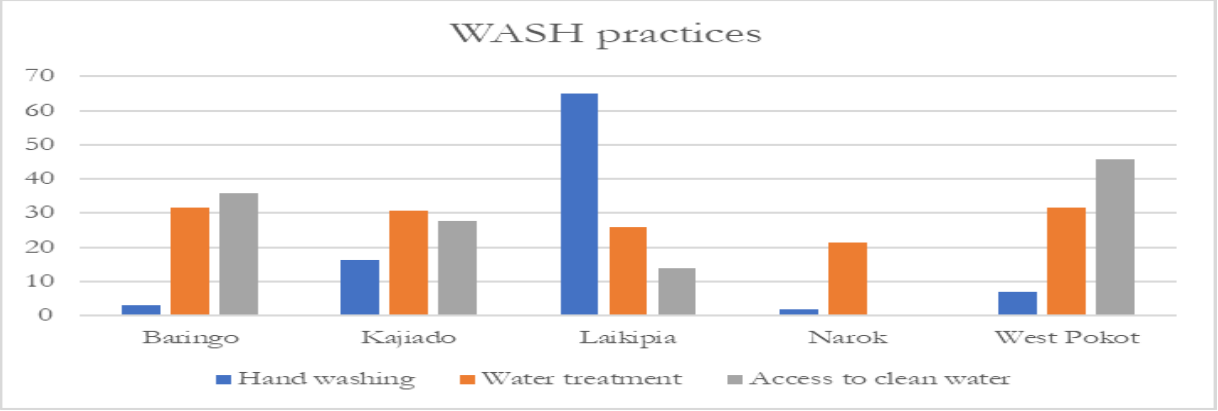


Figure 3.22: Agro-Pastoral Cluster Water Hygiene and Sanitation (WASH) practices

Basic/structural/capitals

The county governments across the cluster have developed the second County Integrated Development Plan (CIDP) 2018-2022. The CIDP outlines the process through which efforts at national and devolved levels of government and other relevant public institutions shall be coordinated at the local level to bring economic, social, environmental, and legal aspects of development together to meet the needs and targets set for the local communities. If implemented within the stipulated timeframe, the plan will significantly improve the status of local communities potentially leading to decreases in malnutrition.

West Pokot County introduced additional school feeding programs through the ECD platform. The program will target children four years and older. It is possible that it will decrease the prevalence

in malnutrition among older children though it will likely have little impact on those who are under 48 months.

Recommendations

Immediate

- Promote WASH interventions to improve sanitation
- Scale up immunization, Vitamin A and IFAS supplementation among children and women of reproductive age respectively to meet national targets.
- Strengthen surveillance, prevention and management of acute malnutrition and communicable diseases
- Continue nutrition programming such as IMAM, school feeding programs and GFD programming at both health facilities and outreach sites
- Strengthen capacity of health workers and community health volunteers to provide support in nutrition and WASH prevention strategies
- Increase active case finding activities to ensure early detection of cases and increase coverage
- Provide targeted IYCF and WASH social behaviour change interventions for increased uptake of IYCF and WASH knowledge and practices

Medium to Long term

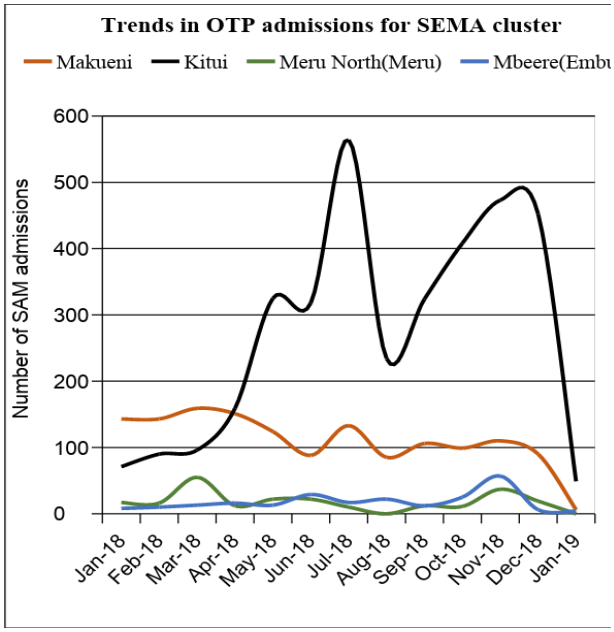
- Promote community resilience interventions including access to financial capital for IGA to address poverty induced barriers
- Address the harmful cultural practices such as FGM and early marriages
- Improve the monitoring and evaluation of health and nutrition services through capacity building
- Continue development of water and irrigation infrastructure especially in the dry northern areas.
- Sustain and scale up the peace building efforts by counties to improve security and sustain livelihoods.
- Increased investment in education of all children with a focus on girls
- Improve coverage of high impact health and nutrition interventions through CHVs, CHWs and other community channels
- Promote dietary diversity through integrated outreach programs with both food security and nutrition interventions
- Increase investments into health, education and road network infrastructure

3.5.4 South Eastern Marginal Cluster (Meru North, Tharaka Nithi, Mbeere, Kitui and Makueni)

Nutrition Situation

The IPC acute malnutrition classification for the most of areas of analysis across SEMA cluster was not possible following limitations in data/information availability with exception of Kitui County. The IPC acute malnutrition classification for Kitui County based on GAM by MUAC (0.4 percent) from sentinel site surveillance data was at acceptable levels (IPC phase 1). The trends in Severe Acute Malnutrition(SAM) and Moderate Acute Malnutrition(MAM) cases in OTP and SFP across the cluster illustrates a decreasing trend as from October 2018 to January 2019. The

comparison between SAM and MAM admissions between January 2019 and January 2018 reveals a slight improvement. Admissions of SAM and MAM cases is an illustration of acute malnutrition however this may be affected by ongoing programming activities such as mass screening, stocks outs, data gaps and health worker strikes. There was no data on SAM and MAM admissions for the past year for Tharaka, and thus not included in the trend analysis as illustrated in figure 3.23 and 3.24.



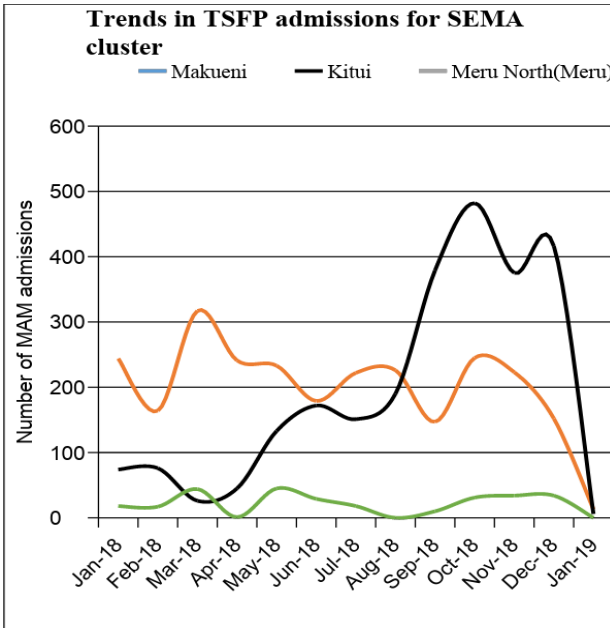


Figure 3.23: Trends in OTP admissions in SEMA cluster Figure 3.24: Trends in SFP admissions in SEMA cluster

Dietary intake

The main food groups provided to children and adults across the Cluster were normal for the season with exception of Marginal Mixed Farming (MMF) livelihood zones where main diet were cereals and legumes. In Kitui, the minimum dietary diversity for children above six months was 32.1 percent while minimum acceptable diet was at 28.1 percent. The Minimum Meal Frequency in Mixed Farming Livelihood Zones across the cluster for under-five and adult was (3-4) meals and (2-3) meals per day remained stable in comparison to the same period 2018. The minimum meal frequency for Marginal Mixed Farming Livelihood Zones was (2-3) meals for under-five and (1-2) meals for adults. The variations in Food Consumption Score (FCS) across the cluster were observed. The FCS across the cluster was classified below 80 percent for acceptable FCS across the cluster with exception of MMF in Mbeere (78.3 percent), Agro pastoral in Meru North (57.3 percent), Makueni (71.8 percent) and Tharaka (65 percent).

The timely initiation to breast milk within 1 hour across the cluster was below 80 percent with exception of Meru North (Meru). Findings of early initiation to breast milk for Kitui, Tharaka (Tharaka Nithi), Makueni, Mbeere (Embu) was 60.4 percent, 70.1 percent, 74.9 percent and 58.3 percent. Data on EBF rate among children below 6 months was unavailable across the cluster with exception of Kitui where EBF prevalence was 75.6 percent above national aggregate of 61.4

percent. The Minimum Meal Frequency and Minimum Dietary Diversity in Kitui County among children aged (6-23 months) was (59.3 percent) and (32.8 percent) respectively.

Morbidity trends among children aged below 5 years

The main child illnesses reported across the cluster include; Upper Respiratory Tract Infections (URTI), Confirmed malaria and diarrhoea. The trends in Upper Respiratory Tract Infections (URTI) among under-fives from October 2018 to January 2019 show a declining trend. The current (January 2019) URTI cases detected are below 2018 same period as illustrated in figure 3.25. The trends in confirmed malaria and diarrhoea similarly illustrated a decreasing trend from October 2018 to January 2019.

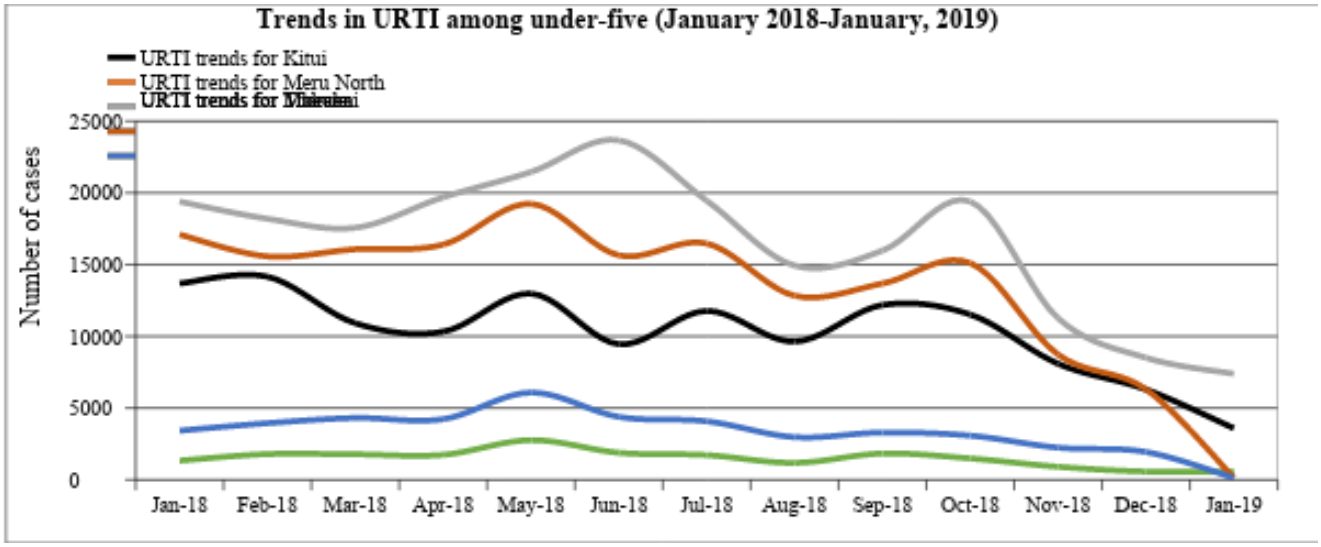


Figure 3.25: Trends in Upper Respiratory Infections for SEMA cluster

Immunization and vitamin A supplementation coverage

The percentage of Fully Immunized Children(FIC) at 1 year across the cluster was above 80 percent with exception of Meru North at 72.6 percent. The Coverage of OPV3(3rd dose at 14 weeks) across the SEMA cluster was above national target of 80 percent with exception Makueni at 77.5 percent. Measles coverage at 9 months was above 80 percent across the cluster as illustrated in figure 3.26. There were no reported outbreaks across the SEMA cluster with exception of suspected 159 measles cases in Kitui (Mutomo and Ngomeni wards).

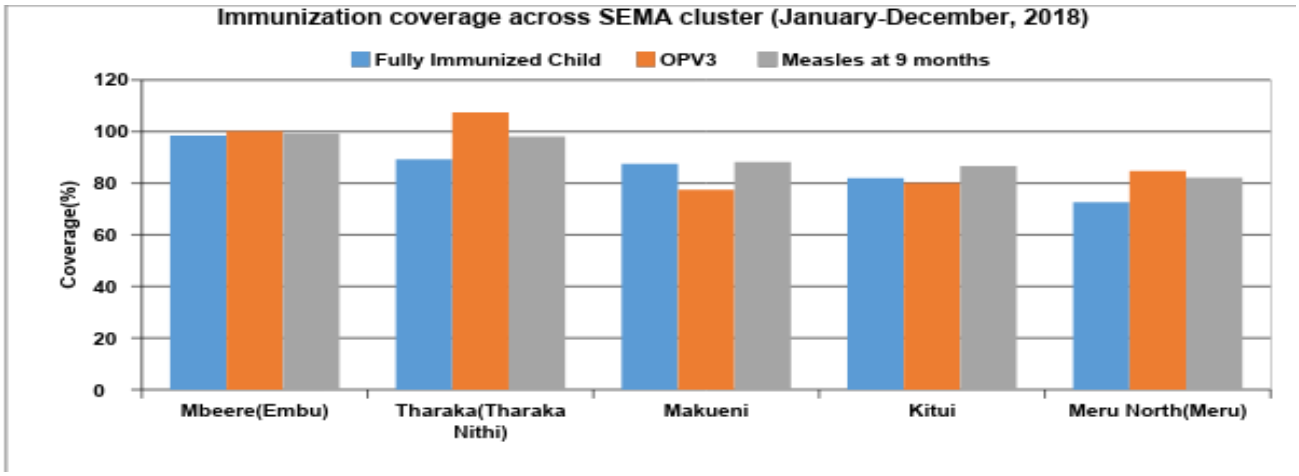


Figure 3.26: Immunization coverage across SEMA cluster (January to December 2018)

The vitamin A supplementation coverage among children aged (6-59 months) in the reporting period between July to December, 2018 was above 80 percent with exception of Meru North which was at 30.7 percent as indicated in figure 3.27. Further analysis of vitamin A coverage among children aged (6-11 months) and (12-59 months) across the SEMA cluster was above 80 percent with exception of Meru North (6-11 and 12-59 months) at 47.7 percent and 28.6 percent respectively.

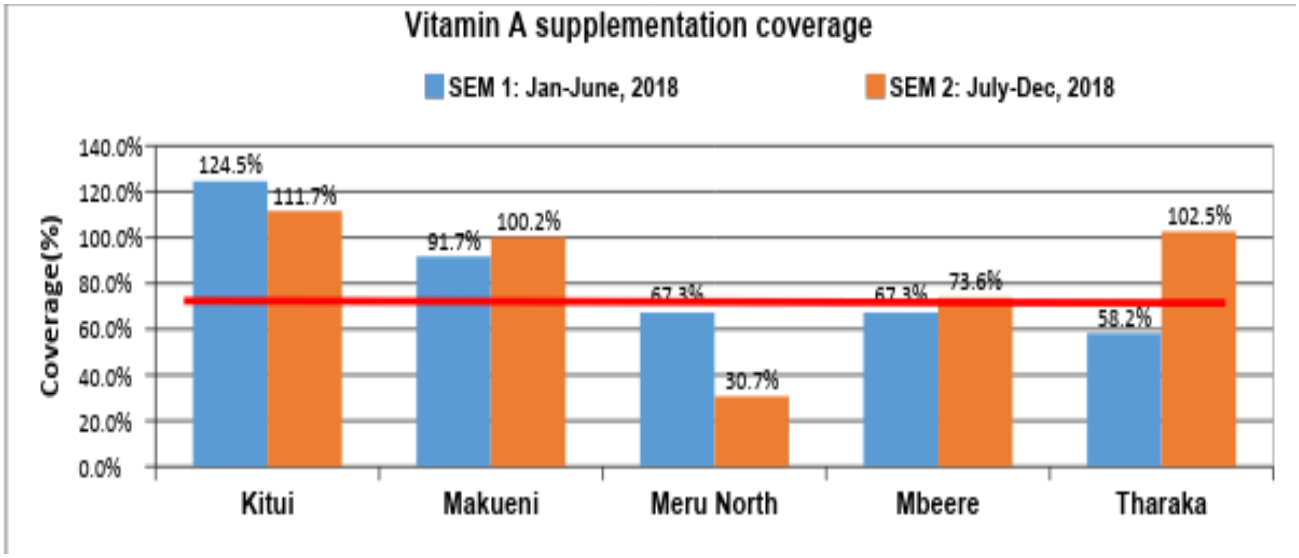


Figure 3.27: Vitamin A supplementation coverage for SEMA cluster (January to December, 2018)

Water and Sanitation

The main source of water at households across the cluster were boreholes, shallow well, rivers, water pan/dams, springs and piped water from system. The average trekking distance from the

household to main water source was below 5 km across the cluster, which is the normal of the season with exception of Meru North and Kitui where average distance was (5.4-6km). The better coverage in Latrine coverage was attributed to CLTS initiatives in Mbeere (Kiambere ward, Evurori and Kanyuombara) wards;

Other issues

- Disruption of health and nutrition services as result of health worker strike from June to October 2018.
- Poverty levels above 30 percent across the cluster. Unemployment levels above 50 percent.
- Market disruptions as result of livestock (suspected Foot and Mouth outbreak in Meru North and Makueni); (New castle in Kitui, Makueni and Meru North) ; Lumpy skin disease (Meru North)
- Crop failure (Maize) as result of infestation of fall army worm in Meru North and Mbeere
- Conflicts/insecurity along the border between Meru North and Isiolo(Kinna).
- Human-wildlife conflicts reported especially in the Marginally Mixed Farming zone of Makueni bordering the Tsavo game reserve in Masongaleni, Mtito Andei and Thange wards.

Conclusion

The IPC for acute malnutrition classification across the cluster was not possible following no data or information available. However, following analysis of GAM by MUAC from NDMA sentinel site for Kitui County the Integrated Phase Classification (IPC) for acute malnutrition was at acceptable levels (IPC phase 1) based on GAM prevalence by MUAC.

Recommendations

Short-term/immediate interventions

- Continuum of IMAM and BFHI/BFCI programmes at facility and community-based levels; routine and mass screening, referral and follow-up.
- Strengthen disease surveillance, treatment and management at health facility and community level through integrated IMCI and EPI services.
- Conduct rapid assessment to determine coverage of lifesaving (IMAM) and preventive (vitamin A, EPI) programmes.
- Strengthen crop and livestock disease surveillance

Medium to Long-term interventions

- Conduct Formative research and assessment of Maternal, Infant and Young Child (MIYCN) feeding practices that will promote consumption of locally available foods.
- Strengthen the capacity of field monitors/HRIOs/facility workers on data/information management (data collection, collation, analysis and utilization) of routine MoH Health Information System and NDMA Early Warning systems.

- To standardize operation definition of indicators within surveillance systems to be relevant to IPC Acute Malnutrition Classification i.e. improved water sources instead of access to water source.
- Advocate for resources at County levels to support health and nutrition services.
- Monitoring of micronutrient supplementation (vitamin A) targets and supplies that meets specified caseloads of a given area.
- Promotion of WASH practices with focus on water treatment (provision of water treatment chemicals); awareness creation on hygiene.
- Rehabilitation and construction of water sources for household use.
- Empower youths and women on income generating activities and start-up job opportunities.

3.5.5 Coastal Marginal Cluster (Kwale, Kilifi, Lamu and Taita Taveta Counties)

Nutrition Situation

The nutrition situation in Coastal marginal has remained stable at acceptable phase over time. According to January NDMA sentinel site report, Lamu and Kwale exhibited a higher percentage of children with MUAC less than 135mm compared to the long-term average. However, this is within the normal range (Figure 3.28). Similar stability is seen in the trends of malnutrition across all the sub-counties (Figure 3.29). This normalcy has been attributed to good harvest and high food stocks from the 2018 long rains season. Access to health care services is good within the county with high levels of health seeking behavior. Exclusive breastfeeding prevalence is high with good initiation practices. Majority of the children have met the Minimum Meal Frequency and about half of the children 6-23 months met Minimum Dietary Diversity. There is marked improvement in overall immunization coverage.

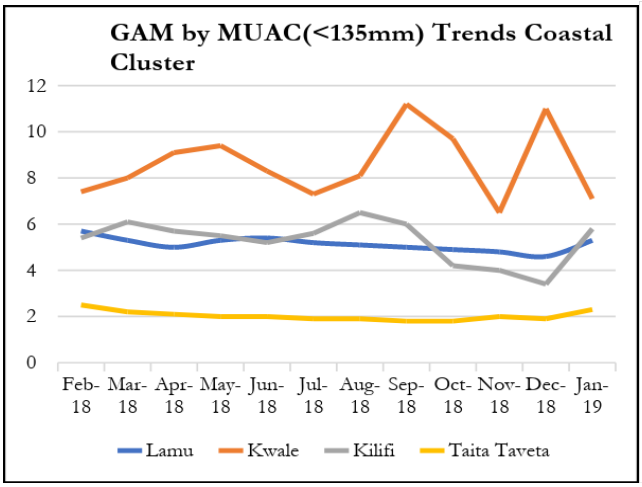


Figure 3.28: Prevalence of children with MUAC <135mm MUAC (<135mm)

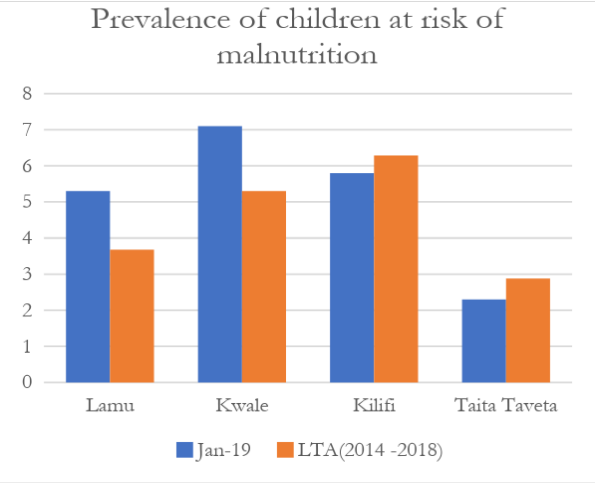


Figure 3.29: Trends of GAM by

Dietary intake

Dietary intake has generally remained stable. The historical patterns show low Minimum Acceptable Diet ranging from 27.9 percent in Taita Taveta to 44 percent in Lamu among children

6-23 months. Minimum dietary diversity for women rages from 35.1 percent in Kilifi, 45.2 percent in Kwale and with good harvests, improved food stocks and availability of milk at household level, dietary intake is expected to remain stable. The frequently consumed foods were cereals, pulses, vegetables and milk consumed at an average of 4-6 times a week.

Morbidity and Mortality

Diarrhea and Malaria were within the normal trend across seasons. The trends of Upper Respiratory tract infections was observed to be low during the current season, however there is an observed increment of cases during the projection period as demonstrated by the trends during the projection period (Figure 3.30). In the period January –February 2019 there were reported cases of Measles in Kwale County. A total 36 cases were reported. No disease outbreaks were reported in the other counties within the cluster.

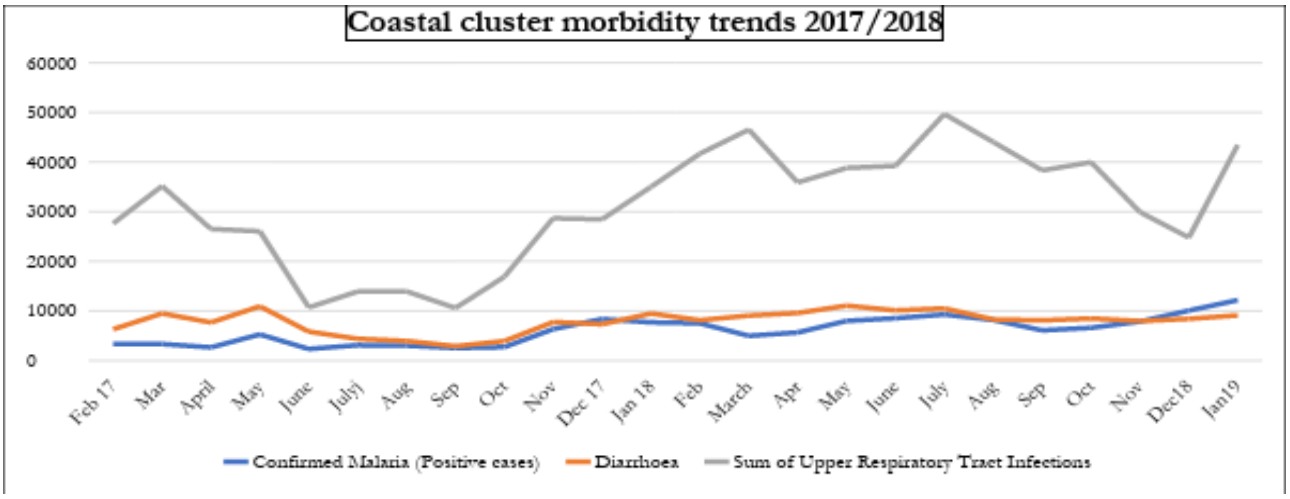


Figure 3.30 Morbidity trends in the Coastal Cluster

Childcare practices

Exclusive breastfeeding ranges from 68.5 percent in Kilifi, 73.4 percent in Kwale and 80.5 percent in Taita Taveta. These prevalences are above the national prevalence of 61.4 percent. Infant and Young Child feeding practices are poor across the cluster. Minimum Acceptable Diet for Kwale, Kilifi and Taita Taveta is 30.5 percent, 25 percent and 27.9 percent respectively. Introduction to solid and semisolid foods was as high as 83.3 percent and 70.2 percent in Taita Taveta and Kwale Counties respectively while low levels were observed in Kilifi at 27.1 percent. Taita Taveta registered high health seeking behavior among caregivers at 93 percent while this data was missing in Lamu, Kwale and Kilifi Counties (Figure 3.31).

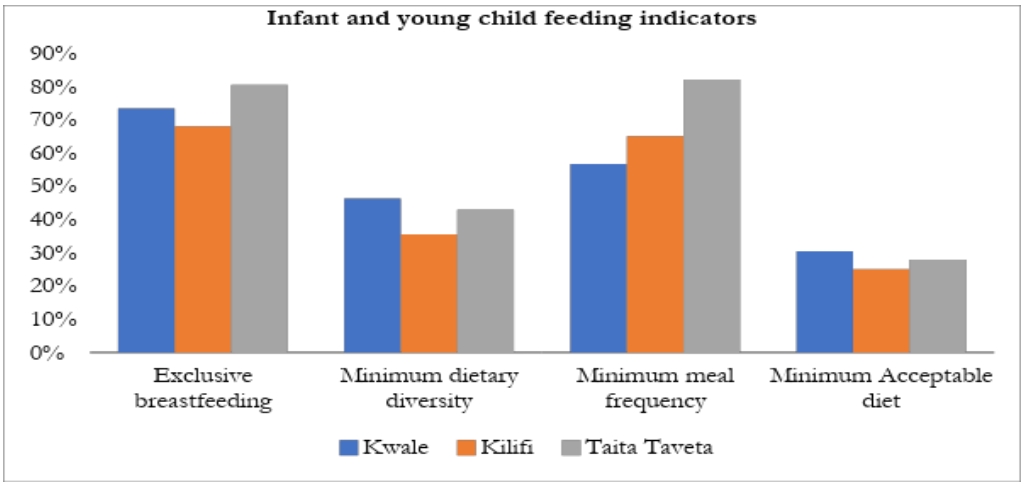


Figure 3.31 IYCF indicators in the Coastal Cluster

Immunization and Vitamin A supplementation

Fully immunized coverage in Kwale County is at 80 percent which is within the national target. Kilifi, Lamu and Taita Taveta counties have a full immunization coverage below national targets at 75 percent, 79 percent and 75 percent respectively (Figure 3.32). Vitamin A supplementation coverage among children 6-59 months in Kilifi, Kwale and Lamu Counties was above the national target of 80 percent at, 127 percent, 115 percent and 93 percent respectively. Only Taita Taveta County was below the average at 72 percent. Generally, Vitamin A supplementation coverage for July to December 2018 has improved compared to the same semester in 2017 (Figure 3.33).

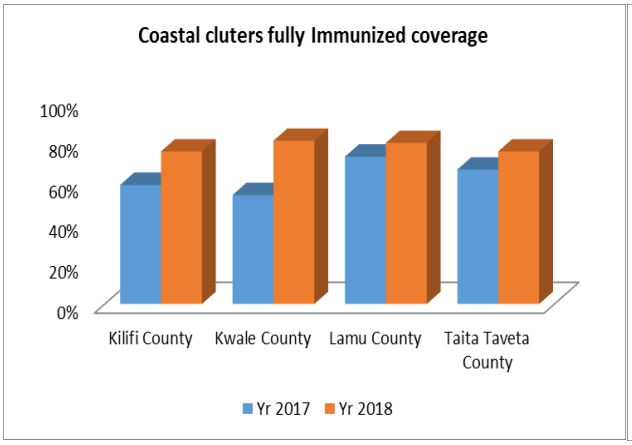


Figure 3.32: Fully immunized coverage

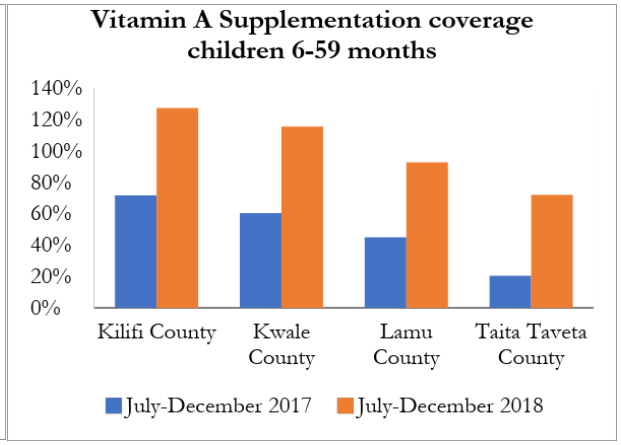


Figure 3.33 Vitamin A supplementation coverage

Water Hygiene and Sanitation (WASH)

Latrine coverage is above 70 percent in Lamu, Kilifi and Taita except for Kwale County and Taveta Sub-County that has a coverage of 60 percent and 60.7 percent respectively. Proper waste disposal ensures high hygiene practices while reducing disease occurrence and acute malnutrition. However, Bargoni in Lamu County has latrine coverage of about 10 percent. Taita Taveta and Lamu Counties have better water treatment levels at 54 percent and Lamu Counties respectively. Kilifi and Lamu counties have low levels at 9.3 percent and 14.4 percent respectively. Hand

washing at the 4 critical times in Taita was 45 percent while Lamu and Kilifi were low at 18 percent and 9 percent respectively (Table 3.2).

Table 3.2: Water Sanitation and Hygiene Indicators

County	Water treatment	Latrine coverage	Hand washing and 4 critical times
Kilifi	9.3%	71.2%	9%
Taita -Taveta	54%	76.5%	45%
Kwale	14.40%	60%	-
Lamu	79%	72%	18%

Recommendations

The following recommendations for each of the counties;

Taita Taveta:

Immediate

- Look out for and strengthen awareness on ARI and malaria in the months of March to May in relation to management and health seeking behaviour
- -Strengthen immunization to meet the recommended threshold
- Strengthen awareness on infant and young child nutrition to increase dietary diversity among children
- Increase awareness on proper waste disposal especially in Taveta Sub-County (Community Led Total Sanitation recommended)
- Strengthen vitamin A supplementation

Medium to Long term

- Carry out periodic assessments to provide current data
- Put interventions in place to address dietary diversity
- Improve staffing in the health facilities
- Repair broken down boreholes to reduce on distance and waiting time

Kilifi

Immediate

- Improve infant and young child feeding practices including scale up of Baby Friendly Community Initiative.
- Improve access to safe and adequate water
- Sustained coverage of health and nutrition services.
- Improve hygiene and sanitation practices
- Conduct integrated outreaches and active case finding to improve coverage of health and nutrition services and access in hard to reach areas.
- Interventions to improve household food security.

Medium to Long term

- Improve infant and young child feeding practices including scale up of Baby Friendly Community Initiative.
- Interventions to improve household food security.
- Improve access to safe and adequate water

- Enhanced multi-sectorial collaboration and coordination
- Health system strengthening to improve service delivery
- Improved health seeking behaviour
- Improve hygiene and sanitation infrastructure
- Improved access to education and women empowerment

Lamu

Immediate

- Iron & foliate supplementation to all pregnant women throughout pregnancy.
- MIYCN Interventions (EBF and Timely Intro of complementary Foods)
- Zinc and Vitamin A Supplementation
- Strengthen malnutrition screening and active case search as well as strengthen integrated management of acute malnutrition in the community
- Integrated Outreaches services in hard to reach areas.
- Enhance community dialogues as a strategy to promote good practices and strengthening community ownership for community strategy and health systems support
- Initiate cooking demonstrations through the BFCI roll out using the mother to mother support groups

Medium to Long term

- Scale up roll out of Baby Friendly Community Initiative
- Lobby County government to employ more nutrition staffs to improve health service delivery
- Establishing/strengthening and reactivating non-functional CUs across the county to enhance community nutrition linkages
- Promote household food security through supporting women empowerment by implementing capacity strengthening on entrepreneurship and business skills.
- Conduct KAP survey on MIYCN issues

Kwale

Immediate

- Map out malnutrition hot spots, develop and implement integrated health and nutrition plan for the hot spots,
- Strengthen disease and malnutrition surveillance and monitoring system both at the community and health facility level,
- Build technical capacity of service providers (HWs & CHVs) on MIYCN knowledge and appropriate communication skills,
- Reflect on and possibly readjust the 2017 MYICN KABP survey recommendations to integrate the actions into the annual work plan for implementation.

Medium to Long term

- Advocate for SMART survey assessment possibly consider stratification based either on livelihood or other vulnerability criteria to get a more precise situation,
- Strengthen multi stakeholder/ agency coordination system for maximizing food and nutrition outcomes,

- There's a likelihood of under performance of the long rains and so, the county needs to review its contingency plan for adequate preparedness for 'alert phase' response,
- Operationalize baby friendly hospital initiative (BFHI) targeting hospitals and health centers,
- Establish/ or scale up baby friendly community initiatives (BFCI),
- Consolidate/ implement community led total sanitation (CLTS) at scale.

Annex 1: Training agenda

IPC for Acute Malnutrition Training and Analysis - Agenda
Eagle Palace Hotel Nakuru
25th February to 2nd March 2019

	Day one – Monday	**Chair - Anthony Mativo**
0800	Registration/Welcome	MOH/ Chair NITWG
0830	Opening	Head - NDU
0850	Workshop objectives	Lucy Kinyua
0900	What is New in IPC version 3.0	Douglas
0930	IPC Overview	Lucy Maina
1030	Health break	
1130	Overview of Function 1, Protocols 1.1 and 1.2	Samwel Mbugua
1230	Overview of Function 2	Paul Migwi
1300	Lunch	
1400	Protocol 2.1 IPC Analytical Framework	Lucy Maina
1400	Protocol 2.2 IPC Reference Table	Lydia Ndung'u
1600	Health Break	
1615	Protocol 2.3 Analytical Parameters	Douglas
1700	Preparation of cluster document repository/ briefing kit	Kibet and Lillian K
1800	Day 1 review by the facilitators	Lucy Kinyua
	Day 2 – Tuesday	**Chair - Lillian Kaindi**
0800	Day 1 recap	Anthony Mativo
0830	Protocol 2.4 Evidence Reliability Criteria	Douglas
1030	Health break	
1100	Protocol 2.5 Minimum Evidence and Analysis Requirements	Lucy Maina
1300	Lunch break	
1400	Allocation of analysis areas and formation of groups	Lucy K & Lucy Maina
1430	Protocol 2.6 Overview of IPC AMN Analysis Steps	Paul Migwi
1530	Health break	
1600	Protocol 2.6 Step 1	Lydia Ndung'u
1630	Protocol 2.6 Step 2	Kibet Chirchir
1700	Protocol 2.6 Step 3	Mark Gathii
1730	Groups convene and discuss analysis areas (Five groups based on livelihood clusters)	Group leads
1830	Day 2 review by the facilitators	Lucy Kinyua
	Day 3 – Wednesday	**Chair - Wycliff Machani**
0800	Day 2 recap	Lillian Kaindi
0830	Protocol 2.6 Step 4	Dr Judith Munga
0900	Protocol 2.6 Step 5	Chirchir Kibet
0930	Protocol 2.6 Step 6	Samwel Mbugua
1000	Protocol 2.6 Step 7	Lydia Ndung'u
1030	Health break	
1100	Protocol 2.6 Step 8	Leila A
1130	Protocol 2.6 Step 9	Lillian K
1200	Protocol 2.6 Step 10	Mark G
1230	Protocol 2.6 Step 11	Paul Migwi
1300	Lunch break	
1400	Function 3: Communicate for Action	Mark Gathii

1500	Function 4: Quality Assurance: Overview and Protocols 4.1 and 4.2 IPC Self-Assessment Tool and Quality Review	Kevin Mutegi
1515	Famine Protocols	Douglas
1545	Special Protocols for Areas with Limited or No Humanitarian Access	Wyclif Machani
1615	Health break	
1630	Discussion session/training feedback/address grey areas	Samwel Mbugua
1700	Fill out area analysis worksheets in cluster teams: Protocol 2.6	Group leaders
1830	Progress review	Lucy Maina
	Day 4 – Thursday	**Chair Dr Sophie Ngala**
0800	Recap	Wycliff Machani
0830	Fill out area analysis worksheets in cluster teams	Group leads
0930	Special Nutrition Information Technical Working Group – Isiolo and Tana River SMART survey findings	Anthony Mativo – Chair NITWG
1030	Health break	
1100	Special Nutrition Information Technical Working Group – qualitative data in assessments	Anthony Mativo – Chair NITWG
1215	Fill out area analysis worksheets in cluster teams	Group leads
1300	Lunch break	
1400	Continue filling out area analysis worksheets in cluster teams	Group leads
1600	Health break	
1600	Progress review	Lucy K, Lucy Maina
1615	Continue filling out area analysis worksheets in cluster teams/write area of analysis report	Group leads
1830	Progress review	Lucy K, Lucy Maina
	Day 5 – Friday	**Chair Leila Akinyi**
0800	Progress review	Dr Sophie Ngala
0830	Continue filling out area analysis worksheets in cluster teams/ write area analysis report	Group leaders
1030	Health break	
1100	Plenary presentation/discussion	Group leads/Samwel Mbugua
1300	Lunch break	
1400	Revise worksheets and report based on feedback and further learning from plenary and write cluster report	Group leads
1600	Progress review	Lillian Kaindi
1615	Revise worksheets and report based on feedback and further learning from plenary and write cluster report	Dr Judith
1830	Progress review	Lillian Kaindi
	Day 6 – Saturday	**Chair Lydia Ndung'u**
0800	Finalize worksheets and write cluster reports	Kevin Mutegi
1030	Health break	
1100	Presentation of current and projected map for final endorsement by analysis team	Lucy Kinyua
1140	Consolidate all worksheets, reports and any other relevant materials/products used or generated during the analysis including automated excel analysis sheets/graphs etc.	Lillian Kaindi, Lucy Maina, Lucy K
1210	Technical discussion - caseload calculation – lessons learnt and areas requiring improvement	Lucy Maina and Chirchir Kibet
1300	Lunch break	

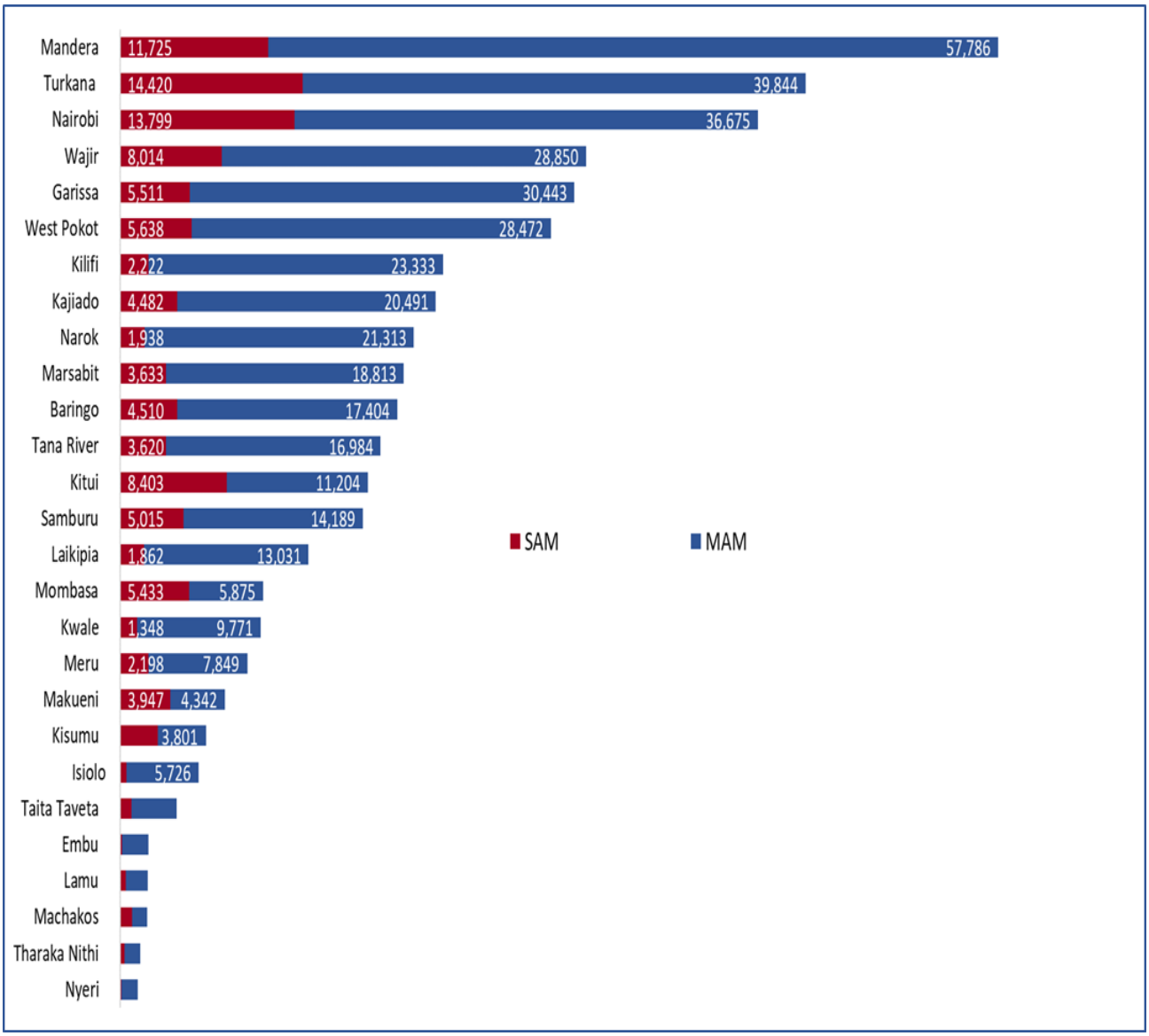
1400	Caseload calculation Finalization of cluster reports Draft PPTs	Lucy Kinyua, Leila , Lucy Maina, Kibet Chirchir Group leads
1600	Presentation of caseload and review	
1700	**Closing session one**	
3rd March	Departure of most of nutrition analysis team members to duty station	
3rd to 6th March	Small team joins food security team	
7th March	Departure to duty station	

Annex 2: Attendance list

No	NAME	ORGANIZATION
1	Leila Akinyi	MOH – national
2	Samuel Mbugua	Egerton University
3	Dr. Judith Munga	Kenyatta University
4	Jardine Ngolo	UNICEF – NSO Kilifi, Lamu, Mombasa
5	Tabby Adhiambo	MOH – national
6	Mark Gathii	NITWG support
7	Lucy w Kinyua	MOH – national
8	Mercy Kithinji	MOH CNC – Embu county
9	Leah Chelobei	MOH West Pokot County
10	Wycliff Machani	MOH CNC – Turkana County
11	Immaculate Mueni	MOH CNC – Marsabit County
12	Daniel Kithinji	MOH - Samburu County
13	Paul migwi	MOH CNC – Nyandarua County
14	Dr Duka Mogaka	MOH - Samburu County
15	Ann Kimwa	MOH CNC – Baringo County
16	Nicholas Kirimi	UNICEF – Garissa
17	Hared Sugow	MOH CNC – Mandera County
18	Charles Mwashighadi	MOH CNC – Lamu County
19	Dr Sophie Ngala	Nairobi University
20	Prof. Kogi- Makau	Nairobi University
21	Lucy Maina	UNICEF – Nairobi
22	Anthony Mativo	World Vision
23	Lillian Kahindi	ACF – Kenya
24	Dounglas Jayasekaran	IPC global
25	Lydia Ndungu	SMART project
26	Edgar Okoth	ACF – Kenya
27	Sarah King	ACF – Regional
28	Tomas Zaba	UNICEF – Mozambique
29	Dancliff Mbura	ACF – Kenya
30	Brian Asande	Feed the Children
31	Colleta Aoko	Food for the Hungry
32	Salome Tsindori	ACF – Kenya
33	Chirchir Kibet	UNICEF – Nairobi
34	Leonard Kiriama	Kenya Red Cross
35	Dennis Mramba	World Vision
36	Judah Kiminza	TDH
37	Ledaany Noah	UNICEF - Nairobi
38	Catherine Mwangi	Concern Worldwide

No	NAME	ORGANIZATION
39	Edward Korir	Save the Children
40	Suzanne Mboya	EU - ECHO
41	Kevin Mutegi	NITWG support
42	Haret Sugow	MOH CNC – Mandera County
43	Veronica Kirogo	Head – Nutrition and Dietetics

Annex 3: Estimated Caseloads for GAM and SAM



Annex 4: Estimated Caseloads and targets; GAM, MAM and SAM

County	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
Baringo	21,915	12,085	4,510	3,383	17,404	8,702	951	951
Embu	2,214	1,144	148	111	2,067	1,033	162	162
Garissa	35,954	19,355	5,511	4,133	30,443	15,221	1,026	1,026
Isiolo	6,197	3,216	472	354	5,726	2,863	713	713
Kajiado	24,974	13,608	4,482	3,362	20,491	10,246	3,702	3,702
Kilifi	25,555	13,333	2,222	1,667	23,333	11,666	1,651	1,651
Kitui	19,608	11,905	8,403	6,302	11,204	5,602	566	566
Kwale	11,118	5,896	1,348	1,011	9,771	4,885	954	954
Laikipia	14,892	7,912	1,862	1,396	13,031	6,515	1,503	1,503
Lamu	2,181	1,193	409	307	1,772	886	152	152
Machakos	2,122	1,288	909	682	1,212	606	80	80
Makueni	8,290	5,132	3,947	2,961	4,342	2,171	515	515
Mandera	69,511	37,687	11,725	8,794	57,786	28,893	4,846	4,846
Marsabit	22,446	12,131	3,633	2,725	18,813	9,407	2,099	2,099
Meru	10,047	5,573	2,198	1,648	7,849	3,924	909	909
Narok	23,251	12,110	1,938	1,453	21,313	10,657	474	474
Nyeri	1,389	719	99	74	1,289	645	112	112
Samburu	19,203	10,855	5,015	3,761	14,189	7,094	1,585	1,585
Taita Taveta	4,478	2,457	874	655	3,604	1,802	135	135
Tana River	20,604	11,207	3,620	2,715	16,984	8,492	564	564
Tharaka Nithi	1,570	871	343	258	1,226	613	134	134
Turkana	54,265	30,737	14,420	10,815	39,844	19,922	3,237	3,237
Wajir	36,864	20,436	8,014	6,011	28,850	14,425	1,127	1,127
West Pokot	34,110	18,465	5,638	4,229	28,472	14,236	762	762
ASAL	**472,756**	**259,313**	**91,740**	**68,805**	**381,017**	**190,508**	**27,959**	**27,959**
Kisumu	6,770	4,127	2,969	2,227	3,801	1,901	600	600
Mombasa	11,308	7,012	5,433	4,075	5,875	2,938	688	688
Nairobi	50,474	28,687	13,799	10,349	36,675	18,338	1,464	1,464
URBAN	**68,552**	**39,826**	**22,201**	**16,651**	**46,351**	**23,176**	**2,752**	**2,752**
GRAND TOTAL	**541,308**	**299,139**	**113,941**	**85,455**	**427,368**	**213,684**	**30,712**	**30,712**

Annex 5: Latest Acute Malnutrition Prevalence (GAM by WHZ)

Survey Area	Survey date	GAM WHZ CHILDREN 6 to 59 MONTHS (%, 95% CI)	SAM WHZ CHILDREN 6 to 59 MONTHS (%, 95% CI)	GAM MUAC CHILDREN 6 to 59 MONTHS (%, 95% CI)	SAM MUAC CHILDREN 6 to 59 MONTHS (%, 95% CI)	PLW (%)	Plausibility Score (%)
Tana River	Feb- 19	14.8 (11.7 - 18.4)	2.6 (1.7 - 4.2)	2.7 (1.6 - 4.6)	0.3 (0.1 - 1.2)	1.7	5
Isiolo	Feb - 19	9.2 (6.6 - 12.6)	0.7 (0.2 - 2.4)	2.5 (1.2 - 4.9)	0.2 (0.0 - 1.3)	6.4	3
Turkana Central	Jun-18	17.5 (14.1-21.5)	4.7 (3.1-7.0)	3.9 (2.5 - 6.1)	1.1 (0.5-2.4)	6.3	7
Turkana North	Jun-18	15.9 (12.1-20.6)	3.3 (2.0-5.4)	5.2 (2.6-8.7)	0.3 (0.1-1.4)	9.2	3
Turkana South	Jun-18	19.5 (15.8-23.8)	2.7 (1.6-4.4)	4.7 (3.2-6.8)	0.7 (0.2-1.8)	4.8	7
Turkana West	Jun-18	19.1 (15.3-23.7)	5.5 (3.8-8.1)	8.0 (6.1-10.4)	1.2 (0.5-2.5)	6.1	13
Marsabit - Laisamis	Jul-18	13.2 (9.2-18.6)	2.4 (1.0- 5.4)	2.8 (1.5- 5.4)	0.5 (0.1- 2.2)	15.3	4
Marsabit North Horr	Jul-18	23.5 (19.2-28.3)	3.5 (2.2- 5.5)	4.6 (2.9- 7.2)	0.6 (0.1- 2.3)	13.4	1
Marsabit - Moyale	Jul-18	7.8 (4.7-12.5)	1.0 (0.4- 2.6)	3.0% (1.5- 5.7)	0.7 (0.2- 2.3)	5.3	5
Marsabit - Saku	Jul-18	5.7 (3.5- 9.1)	0.3 (0.0- 2.1)	2.0% (1.0- 3.7)	0.6 (0.1- 2.2)	6.9	5
Wajir pastoral	Jul-18	12.6 (10.2 - 15.5)	1.8 (1.1 - 3.0)	4.5 (2.6 - 7.7)	1.5 (0.6 - 3.4)	5	6
Wajir agro-pastoral	Jul-18	10.6 (7.9 - 14.1)	1.8 (1.0 - 3.4)	2.7 (1.6 - 4.3)	0.7 (0.3 - 1.7)	1.3	9
Baringo (East Pokot)	Jul-18	16.8 (13.9 - 20.2)	4.0 (2.8 - 5.9)	3.4 (2.0 - 5.7)	0.9 (0.4 - 2.0)	6.3	2
Baringo (North & Marigat)	Jul-18	7.8 (5.2 - 11.5)	0.2 (0.0 - 1.4)	2.6 (1.5 - 4.3)	0.3 (0.1 - 1.4)	1.9	5
Samburu	Jul-18	15.7 (12.4 - 19.8)	4.1 (2.6 - 6.5)	4.7 (2.9 - 7.5)	1.2 (0.5 -2.8)	10.2	7
West Pokot	Jun-18	11.0 (8.9 - 13.5)	0.9 (0.4 - 2.0)	4.0 (2.5 - 6.3)	0.5 (0.2 - 1.4)	2	7
Garissa	Jun-18	13.7 (11.1 - 16.8)	2.1 (1.3 - 3.2)	4.0 (2.6 - 6.2)	0.3 (0.1 - 1.0)	2.1	0
Mandera	Jul-18	16.6 (13.3-20.4)	2.8 (1.6-4.7)	7.7 (5.5 - 10.7)	1.9 (1.0 - 3.6)	6	6

Annex 6: Summary of contributing factors

Pastoral North East Cluster (Tana River, Garissa, Wajir, Mandera and Isiolo Counties)

		ISIOLO	Mandera	Wajir Agro-Pastoral	Wajir Pastoral	Garissa	Tana river
SUMMARY CONTRIBUTING FACTORS under summary conclusions]		**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRIBUTING FACTOR** **NO DATA**	**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRI BUTING FACTOR** **NO DATA**	**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRIBUTING FACTOR** **NO DATA**	**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRIBUTI NG FACTOR** **NO DATA**	**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRIBUTI NG FACTOR** **NO DATA**	**COLOUR/SHADE THE CELL AS** **MAJOR** **MINOR** **NOT A CONTRIBUTIN G FACTOR** **NO DATA**
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						
Food dimensions	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	Measles vaccination						
	Polo vaccination						
	Vitamin A supplementation						

		ISIOLO	Mandera	Wajir Agro-Pastoral	Wajir Pastoral	Garissa	Tana river
services & unhealthy environment	Skilled birth attendance						
	Health seeking behaviour						
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)						
	Access to a sufficient quantity of water						
	Access to sanitation facilities						
	Access to an improved source of drinking water						
	Others						
Basic causes	Human capital						
	Physical capital						
	Financial capital						
	Natural capital						
	Social capital						
	Policies, Institutions and Processes						
	Usual/Normal Shocks						
	Recurrent Crises due to Unusual Shocks						
	Other basic causes						
Other nutrition issues	Anaemia among children 6-59 months						
	Anaemia among pregnant women						
	Anaemia among non-pregnant women						
	Vitamin A deficiency among children 6-59 months						
	Low birth weight						
	Fertility rate						
	Others						

Pastoral North West (Marsabit, Turkana and Samburu Counties

		Turkana North/ Kibish	Turkana Central/ Loima	Turkana South/East	Turkana West	Moyale	Laisams	Saku	North Horr	Samburu
SUMMARY CONTRIBUTING FACTORS		COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA								
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									
Food dimensions	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	Measles vaccination									
	Polio vaccination									
	Vitamin A supplementation									
	Skilled birth attendance									
	Health seeking behaviour									

		Turkana North/ Kibish	Turkana Central/ Loima	Turkana South/East	Turkana West	Moyale	Laisams	Saku	North Horr	Samburu
environment	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)									
	Access to a sufficient quantity of water									
	Access to sanitation facilities									
	Access to an improved source of drinking water									
	Others									
Basic causes	Human capital									
	Physical capital									
	Financial capital									
	Natural capital									
	Social capital									
	Policies, Institutions and Processes									
	Usual/Normal Shocks									
	Recurrent Crises due to Unusual Shocks									
	Other basic causes									
Other nutrition issues	Anaemia among children 6-59 months									
	Anaemia among pregnant women									
	Anaemia among non-pregnant women									
	Vitamin A deficiency among children 6-59 months									
	Low birth weight									
	Fertility rate									
	Others									

Agro Pastoral Cluster (Kieni, West Pokot, Baringo, Laikipia, Narok and Kajiado Counties)

SUMMARY CONTRIBUTING FACTORS		Baringo (Tiaty) COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	Kieni (Nyeri) COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	Kajiado COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	Laikipia COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	West Pokot COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	Narok COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA
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						
Food dimensions	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						
	Polo vaccination						
	Vitamin A supplementation						
	Skilled birth attendance						
	Health seeking behaviour						

		Baringo (Tiaty)	Kieni (Nyeri)	Kajiado	Laikipia	West Pokot	Narok
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)						
	Access to a sufficient quantity of water						
	Access to sanitation facilities						
	Access to an improved source of drinking water						
	Others						
Basic causes	Human capital						
	Physical capital						
	Financial capital						
	Natural capital						
	Social capital						
	Policies, Institutions and Processes						
	Usual/Normal Shocks						
	Recurrent Crises due to Unusual Shocks						
	Other basic causes						
Other nutrition issues	Anaemia among children 6-59 months						
	Anaemia among pregnant women						
	Anaemia among non-pregnant women						
	Vitamin A deficiency among children 6-59 months						
	Low birth weight						
	Fertility rate						
	Others						

Coastal Marginal Cluster (Kwale, Kilifi, Lamu and Taita Taveta Counties)

		Kilifi	Lamu	Taita Taveta	Kwale
SUMMARY CONTRIBUTING FACTORS		COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA	COLOUR/SHADE THE CELL AS MAJOR MINOR NOT A CONTRIBUTING FACTOR NO DATA
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				
Food dimensions	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				
	Polo vaccination				
	Vitamin A supplementation				
	Skilled birth attendance				
	Health seeking behaviour				

		Kilifi	Lamu	Taita Taveta	Kwale
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)				
	Access to a sufficient quantity of water				
	Access to sanitation facilities				
	Access to an improved source of drinking water				
	Others				
Basic causes	Human capital				
	Physical capital				
	Financial capital				
	Natural capital				
	Social capital				
	Policies, Institutions and Processes				
	Usual/Normal Shocks				
	Recurrent Crises due to Unusual Shocks				
	Other basic causes				
Other nutrition issues	Anaemia among children 6-59 months				
	Anaemia among pregnant women				
	Anaemia among non-pregnant women				
	Vitamin A deficiency among children 6-59 months				
	Low birth weight				
	Fertility rate				
	Others				

South East Marginal Cluster (Kitui, Makueni, Meru North, Mbeere, Tharaka

		KITUI	MAKUENI	MERU NORTH	MBEERE	THARAKA
SUMMARY CONTRIBUTING FACTORS		COLOUR/SHADE THE CELL AS MAJOR / MINOR / NOT A CONTRIBUTING FACTOR / NO DATA	COLOUR/SHADE THE CELL AS MAJOR / MINOR / NOT A CONTRIBUTING FACTOR / NO DATA	COLOUR/SHADE THE CELL AS MAJOR / MINOR / NOT A CONTRIBUTING FACTOR / NO DATA	COLOUR/SHADE THE CELL AS MAJOR / MINOR / NOT A CONTRIBUTING FACTOR / NO DATA	COLOUR/SHADE THE CELL AS MAJOR / MINOR / NOT A CONTRIBUTING FACTOR / NO DATA
Inadequate dietary intake	Minimum Dietary Diversity (MDD)					
	Minimum Meal Frequency (MMF)					
	Minimum Acceptable Diet (MAD)					
	Minimum Dietary Diversity – Women (MDD-W)					
	Others: Food Consumption Score					
Diseases	Diarrhoea					
	Dysentery					
	Malaria					
	HIV/AIDS prevalence					
	Acute Respiratory Infection					
	Disease outbreak					
	Others	-	-	-	-	-
Food dimensions	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	Measles vaccination					
	Polo vaccination					
	Vitamin A supplementation					
	Skilled birth attendance					
	Health seeking behaviour					
	Coverage of outreach programmes – CMAM					

		KITUI	MAKUENI	MERU NORTH	MBEERE	THARAKA
environment	programme coverage (SAM, MAM, or both)					
	Access to a sufficient quantity of water					
	Access to sanitation facilities					
	Access to an improved source of drinking water					
	Others	-	-	-	-	-
Basic causes	Human capital					
	Physical capital					
	Financial capital					
	Natural capital					
	Social capital					
	Policies, Institutions and Processes					
	Usual/Normal Shocks					
	Recurrent Crises due to Unusual Shocks					
	Other basic causes					
Other nutrition issues	Anaemia among children 6-59 months					
	Anaemia among pregnant women					
	Anaemia among non-pregnant women					
	Vitamin A deficiency among children 6-59 months					
	Low birth weight					
	Fertility rate					
	Others					

Annex 7: Nutrition Situation - One Page Summary

KENYA NUTRITION SITUATION OVERVIEW
ARID AND SEMI-ARID AREAS (ASAL), FEBRUARY 2019

Integrated Phase Classification (IPC) for acute malnutrition has been conducted as part of the Short Rains Assessment (SRA). The analysis shows the nutrition situation is stable across the Arid and Semi-Arid (ASAL) areas (Figure 1) though still critical in some counties. Turkana, Samburu and Mandera counties as well as East Pokot and North Horr sub-counties have remained at critical level (Phase 4; GAM WHZ 15.0 - 29.9 percent) while Wajir, Tana River, West Pokot, Garissa and Laisamis counties are at serious level (Phase 3; GAM WHZ 10.0 -14.9 percent). Isiolo, Saku and Moyale are classified as alert (Phase 2; GAM WHZ ≥ 5 to 9.9 percent) while Laikipia, Kitui, Kajiado, Taita Taveta, Kilifi, Kwale and Lamu are at acceptable level (Phase 1; GAM WHZ <5 percent). Nutrition situation is likely to remain stable across the areas during the projection period except for Wajir-Pastoral and Tana River which are likely to deteriorate to critical and Isiolo to serious phase respectively (Figure 2).

The negative effects of the below average 2018 short rains was offset by the positive impacts of the 2018 long rains which resulted in substantial regeneration of pasture, improved crop production and subsequently improved food and nutrition security situation. As a result stable food prices and access to markets, favorable terms of trade, reasonable milk availability in pastoral and agro-pastoral areas and food stocks in agricultural areas were recorded during the period under review. However, poor child feeding and care practices, low level of maternal education, reliance on rain fed agriculture and livestock production, and poor access to health care services continue to negatively impact health and nutrition situation especially in the arid counties. While the nutrition situation is projected to remain stable in most areas, there is potential for fast deterioration should the 2019 long rains performance be poor.

The estimated number of children 6 to 59 months requiring treatment is 541,309 with more increase observed in severe acute malnutrition (SAM) caseloads (Figure 3 and Table 1) . The increase was mainly informed by the review and consideration of SAM program admissions where over achievement of SAM program admission was recorded surpassing the targets for 2018 (Figure 4) despite modest coverages being observed during coverage assessments. The capacity of the health system has been improving over the past several years in relation to continued recruitment of health workers, increasing number of health facilities and improved delivery of commodities directly to health facilities. Hence several counties surpassed their respective targets, and in some cases the estimated total caseload leading to adjustment of estimates to fit to the actual admissions observed.

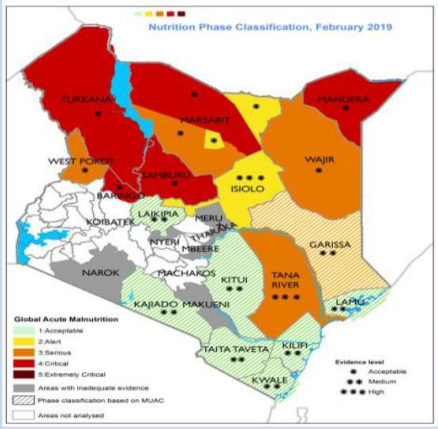


Figure 1. Current nutrition situation map

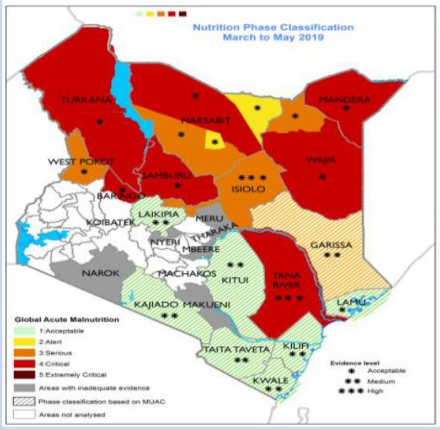


Figure 2. Projected nutrition situation map

	FEB 2019	AUG 2018
Total caseload of acutely malnourished children	541,309	510,593
SAM 6-59 months	113,941	85,105
MAM 6-59 months	427,368	425,488
PLW caseload	30,712	31,354

Figure 4: Trends of Admission in SAM Reported From Health Facilities Versus Annual Targets

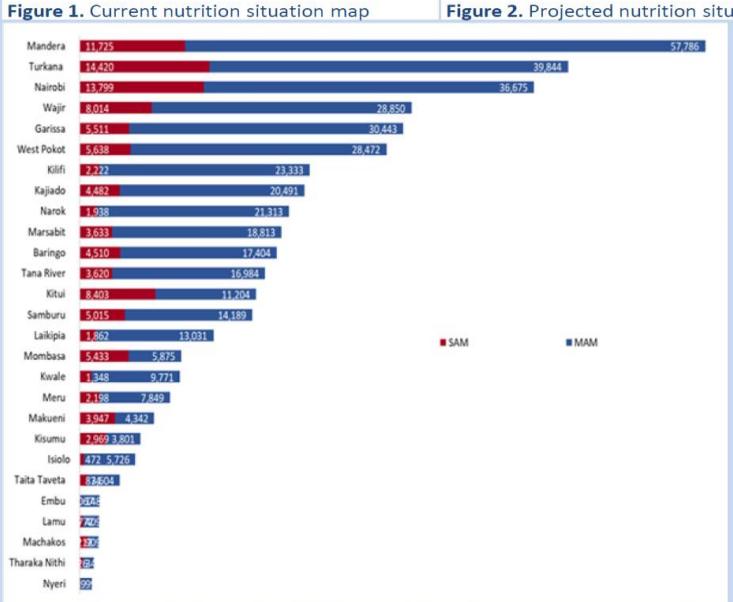


Figure 3. Estimated Caseloads of Children 6-59 months requiring treatment for Acute Malnutrition - ASAL and Urban counties, February 2019

Table 1. Estimated Caseloads of Children and Pregnant & Lactating Women Requiring Treatment for Acute Malnutrition, Feb 2019

Area	GAM 6 to 59 m	SAM 6 to 59 m	MAM 6 to 59 m	PLWs
ASAL	472,757	91,740	381,017	27,960
Urban	68,552	22,201	46,351	2,752
Total Caseload	**541,309**	**113,941**	**427,368**	**30,712**

Key recommendations:

- Closely monitor the performance of the 2019 long rains, update the nutrition situation projected if needed - for timely program adjustment and scale up should the rains perform poorly
- Update contingency and response plans including response to current outbreaks
- Continued implementation of the high impact health and nutrition interventions with focused effort to improve coverages in counties with inadequate coverages
- Closely monitor implementation of the detailed recommendations provided in the full nutrition situation report
- Scale up current levels of health and nutrition interventions in Wajir and Tana river counties to mitigate the effects of the projected deterioration
- Close monitoring of IMAM program admissions versus targets at health facility and community level to better inform program targeting

IMAM – Integrated Management of Acute Malnutrition;
MAM – Moderate Acute Malnutrition;
SAM – Severe Acute Malnutrition; PLW – Pregnant and Lactating

Created on 6th March 2019. Source: Kenya Food and Nutrition Security Seasonal Assessments.
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