

Greater Horn of Africa Public Health Situation Analysis (PHSA)		Reporting Period: January – June 2023																									
Typologies of emergency	Main health threats	WHO grade	INFORM RISK (RANK)																								
 Food Security  Drought  Epidemics  Conflict  Flood  Displacement	Cholera Measles Malaria Dengue fever Meningitis Polio (cVDPV-2) Other vaccine preventable and vector borne diseases	Grade 3 (20 May 2022)	<table border="1"> <thead> <tr> <th>Country</th> <th>INFORM RISK</th> <th>RISK CLASS</th> </tr> </thead> <tbody> <tr> <td>Djibouti</td> <td>4.9</td> <td>High</td> </tr> <tr> <td>Ethiopia</td> <td>7</td> <td>Very High</td> </tr> <tr> <td>Kenya</td> <td>6.6</td> <td>High</td> </tr> <tr> <td>Somalia</td> <td>8.5</td> <td>Very High</td> </tr> <tr> <td>South Sudan</td> <td>8.5</td> <td>Very High</td> </tr> <tr> <td>Sudan</td> <td>7.3</td> <td>Very High</td> </tr> <tr> <td>Uganda</td> <td>7</td> <td>Very High</td> </tr> </tbody> </table>	Country	INFORM RISK	RISK CLASS	Djibouti	4.9	High	Ethiopia	7	Very High	Kenya	6.6	High	Somalia	8.5	Very High	South Sudan	8.5	Very High	Sudan	7.3	Very High	Uganda	7	Very High
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Acronyms and abbreviations

AIDS	Acquired Immunodeficiency Syndrome
AMN	Acute Malnutrition
ART	Antiretroviral Therapy
ASALs	Arid and semi-arid lands
AWD	Acute Watery Diarrhoea
CEMONC	Comprehensive Emergency Obstetric and Newborn Care
CFR	Case Fatality Rate
CRD	Chronic Respiratory Disease
CVD	Cardiovascular Disease
cVDPV2	Circulating vaccine-derived poliovirus type 2
DHIS2	District Health Information System 2
DHS	Demographic Health Survey
DOR	Dropout Rate
ECHO	European Civil Protection and Humanitarian Aid Operations
EWARS	Early Warning and Alert Response System
FAO	Food and Agriculture Organization
FEWS NET	Famine Early Warning Systems Network
GAM	Global Acute Malnutrition
GBV	Gender-based Violence
GHoA	Greater Horn of Africa
GIS	Geographic Information System
GISC	GIS Centre for Health
HeRAMS	Health Resources and Services Availability Monitoring System
HIM	Health Information Management
HIV	Human Immunodeficiency Virus
IDPs	Internally Displaced Persons
IDSR	Integrated Disease Surveillance and Response
IGAD	Intergovernmental Authority on Development
IMST	Incident Management Support Team
INGO	International Non-governmental Organization
IPC	Integrated Food Security Phase Classification
MAM	Moderate Acute Malnutrition
MASS	Ministry of Social Affairs
MCV1	Measles-containing-vaccine first-dose
MOH	Ministry of Health
MSF	Médecins Sans Frontières
MUAC	Mid Upper Arm Circumference
NCDs	Non-communicable Diseases
NFI	Non -Food Items
NGO	Non-governmental Organisation
NNGOs	National Non-governmental Organization
OCV	Oral Cholera Vaccination
OTP	Out-Patient Therapeutic Feeding Program
PRI	Periodic Intensification of Routine Immunization
PLHIV	People Living with HIV

PLW	Pregnant and Lactating Women
POC	Protection of Civilian
PRSEAH	Prevention and Response to Sexual Exploitation Abuse and Harassment
RDT	Rapid Diagnostic Test
RVF	Rift Valley Fever
SC	Stabilization Centre
SNNP	Southern Nations, Nationalities and Peoples
SAM	Severe Acute Malnutrition
SWEPR	Southwest Ethiopia People Region
TB	Tuberculosis
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USD	United States Dollar
WASH	Water Hygiene and Sanitation
WCO	WHO Country Office
WFP	World Food Programme
WHO	World Health Organization
WHZ	Weight-for-Height Z-Score

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Preface

The Public Health Situational Analysis (PHSA) for the Greater Horn of Africa region aims to describe the humanitarian needs of the people through describing the health and nutrition situation as well as in identifying the potential health threats in the affected countries. The document will also assess the level of change in comparison to the previous PHSA conducted which covered the period from July -December 2022. The health issues and possible risk factors addressed in the document are based on the known disease burden, and their potential impact on morbidity and mortality.

This document is intended for all health sector partners, including local and national authorities, non-governmental organizations (NGOs), donor agencies and United Nations agencies, and will provide a common and comprehensive understanding of the crisis to inform evidence-based collective humanitarian health response.

The current PHSA will provide further, and additional information related to the health status and threats at the regional and country specific level focusing on the food insecurity, malnutrition, disease outbreaks, public health threats and risks, chronic diseases, routine health programs which could be affected by the crisis as well as health information management landscape and humanitarian health response activities. The document has been prepared based on the latest information and secondary data available from the seven countries.

Executive Summary

The Greater Horn of Africa continued to face extreme weather events such as prolonged drought and flooding which have severely impacted people's health and deepened the health crisis in the seven countries. The situation has compounded the food insecurity in the region as millions of people have been displaced due to the drought, conflict and flooding and were unable to carry out agricultural activities. The Horn of Africa countries finally received rainfall in the second quarter of the year. Parts of Somalia, Ethiopia and Kenya received above the normal rainfall and resulted in thousands of people being displaced and hundreds were injured and died due to flooding. As of 30 June 2023, an estimated 59.8 million people were facing high level of food insecurity with 53.6 million in a crisis (IPC Phase 3), 9.3 million in an emergency (IPC Phase 4), and 83,350 in a catastrophe (IPC Phase 5) in South Sudan and Somalia [1]. The current figure shows an increase of 13.5 million (30%) from the estimation six months earlier of 46.3 million facing crisis and above, indicating a worsening of the food insecurity situation in the region. Drought, conflict, flooding, high food prices, diseases and poor health access continued to be the main drivers of food insecurity [1].

An estimated 11.5 million children under five are estimated to suffer from acute malnutrition with 2.9 million of them severely malnourished in 2023 [2]. The highest numbers estimated are from Ethiopia (4.2 million), Sudan(3 million), Somalia (1.8 million) and South Sudan(1.4 million) respectively. Between January and June 2023, over 908,000 children with severe acute malnutrition (SAM) have been admitted into the therapeutic feeding program showing a higher number in comparison to the same period last year. Ethiopia, Somalia, Kenya and South Sudan reported a record level of admissions in comparison to the last five years [3].

The region is hosting over 16.1 million internally displaced persons (IDPs), refugees, and asylum seekers (as of May 31, 2023) with 11.6 million being IDPs, and 4.5 million refugees and asylum seekers, including over 2.3 million new displacements due to drought in the Horn of Africa [4]. In Sudan, due to the ongoing conflict that began on 15 April 2023 resulted in an additional 2.9 million displacements, including over 2.2 million IDPs, and over 697,151 individuals crossed into neighbouring countries and increasing the need for humanitarian support on top of the already existing needs in the region [5].

Countries in the region are dealing with multiple disease outbreaks including cholera (3), measles and malaria in all the seven countries, dengue (2), cVDPV₂(2), hepatitis E virus(2), anthrax (1) and meningitis (1) resulting in an increased morbidity and mortality [3]. With the onset of heavy rains and flooding, the region is witnessing a heavy malaria burden with high numbers reported from Uganda, South Sudan, Sudan and Ethiopia. The COVID-19 pandemic, ongoing conflict, flooding, and drought have affected the existing health service delivery, including immunization services putting significant number of children at risk of vaccine preventable disease outbreaks. Moreover, millions of people have also been displaced and are living in IDP or refugee camps, where access to better health service, safe water, sanitation, and hygiene services is limited. Such circumstances can create a conducive environment for further spread of disease outbreaks like cholera, acute watery diarrhea (AWD), vaccine preventable diseases (VPD) and hepatitis E virus resulting an increased morbidity and mortality.

Predictions suggest that there is a high likelihood of El Niño which is often characterised by various extreme weather events, such as droughts, floods, and heatwaves, all of which are expected to exacerbate the existing health situation. The El Niño is anticipated to bring above-average rains to the eastern parts of the region from October to December, affecting areas like Kenya, the Somali region of Ethiopia, and Somalia; conversely, western parts including South Sudan, Sudan, and Western Ethiopia are likely to experience below-average rains from July to September, potentially intensified by the Indian Ocean Dipole global weather phenomenon.

It's anticipated that there will be an increase in malnutrition cases, vector borne diseases (malaria, dengue and rift valley fever), water borne diseases (cholera, AWD) and vaccine preventable diseases like measles which could exacerbate the already ongoing disease outbreaks [3, 6].

In general, the overall situation in terms of food insecurity and health is very concerning and showing a worsening condition in comparison to the last six months of the year 2022. A well-coordinated multi-sectoral preparedness and response taking into consideration of El Niño's health impact is needed to mitigate disease risk and reduce illness and deaths due to the ongoing crisis.

1. Summary of the crisis

Key features

Location:	Greater Horn of Africa (GHOA) Region (Djibouti, Ethiopia, Kenya, Somalia, Sudan, South Sudan, Uganda)
Start date of crisis:	WHO Grade 3 Emergency declared in May 2022
Typology:	Drought, Food Security, Conflict, Health, and Displacement

Humanitarian Profile

						
308.8 Million (World Bank)	59.8 Million (IPC)	Est. 10.4 Million (IPC, UNICEF, OCHA)	12.15 Million (UNHCR)	0.66 Million (UNHCR)	4.62 Million (UNHCR)	Disease outbreaks (countries affected) (WHO)
Estimated total population	Acutely food insecure population (IPC 3+)	Acute malnutrition	Number of IDPs	Returnees	Refugees	Cholera (3) Measles (7) Malaria (6) Dengue (2) cVDPV2 (2)

Regional Overview

The prolonged drought and flooding severely impacted people's health and deepened a health crisis in the Greater Horn of Africa. The elevated levels of acute food insecurity have led to millions of children under the age of five years estimated to be facing acute malnutrition. The number of reported disease outbreaks and climate-related health emergencies reached its highest ever level this century in the seven countries combined. As a result of El Niño, the region may experience more intense floods, drought, and epidemics. These events are likely to increase the humanitarian needs of the exposed populations, with food security and health expected to be the most affected dimensions.

FOOD INSECURITY: As of 30 June 2023, in the GHoA region, an estimated 59.8 million people are in Integrated Food Security Phase Classification (IPC) Phase 3+, facing crisis levels of food insecurity including 53.6 million in a crisis (IPC Phase 3), 9.3 million in an emergency (IPC Phase 4), and 83,350 in a catastrophe (IPC Phase 5) [1].

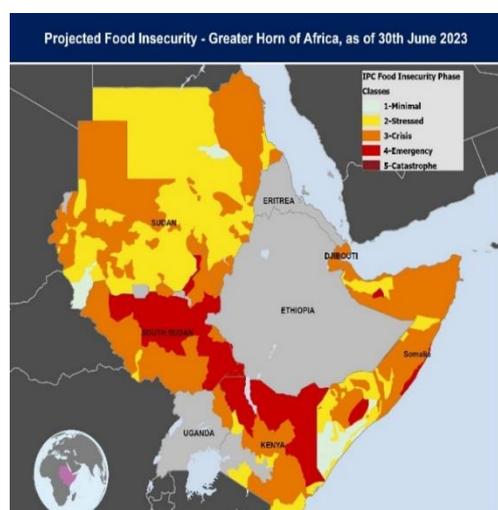


Figure 1: Projected Food Insecurity in GHOA countries, June 2023. (IPC, OCHA)

Table 1: Projected Food Insecurity in GHOA countries, June 2023. (IPC, WFP, OCHA)

IPC ANALYSIS (Projection period)	Assessed Population	Crisis (IPC Phase 3)	Emergency (IPC Phase 4)	Catastrophe (IPC Phase 5)	IPC Phase 3+	IPC3+ as % of assessed Pop
DJIBOUTI (Mar - Jun 2023)	1,181,675	164,077	85,872	0	249,949	21%
KENYA / Asal Counties (Mar - Jun 2023)	16,618,409	4,213,529	1,224,686	0	5,438,215	33%
SOMALIA (Apr-Jun 2023)	16,955,266	4,688,500	1,854,380	40,350	6,583,230	39%
SOUTH SUDAN (Apr 23 - Jul 2023)	12,374,205	4,822,000	2,899,000	43,000	7,764,000	63%
UGANDA/ Karamoja (Apr 23 - Aug 2023)	1,285,000	480,270	101,705	0	581,975	45%
Sub-Total		14,368,376	6,165,643	83,350	20,617,369	
OTHER FOOD SECURITY ESTIMATES						
ETHIOPIA 2023	123,000,000	People in need of food assistance (Source: HRP 2023)			20,100,000	16%
SUDAN (Jul - Sep 2023)	46,874,000	People acutely food insecure Jun-Sept 2023 (Source: WFP)			19,100,000	41%
Total food insecure population in need of assistance IGAD Caseload					59,817,369	

ACUTE MALNUTRITION: Acute malnutrition is expected to affect an estimated 11.5 million children under the age of five in 2023, out of which 2.9 million are estimated to be severely malnourished. South Sudan and Kenya have reported a significant increase in SAM admissions, with the highest numbers in the last three years [2].

Table 2: Acute Malnutrition Situation GHOA region, situation and projections as of December 2023 [7, 2, 8, 9].

Acute Malnutrition Estimation	Kenya (Mar - May 23)	Somalia (Mar -Jun 23)	Uganda (Feb 23- Jan 24)	South Sudan (Jul 22- Jun 23)	Sudan (2023)	Ethiopia (2023)	Djibouti (Jan-Dec 23)
Estimated SAM (< 5 yrs)	243K	478K	19.6K	346K	610,000	1.2 million	5,500
Estimated MAM (< 5 yrs)	728K	1.3 million	70K	1.1 million	2.4 million	3 million	27,800
Estimated GAM (< 5 yrs)	970K	1.8 million	89K	1.4 million	3 million	4.2 million	33,000

Between January and June 2023, over 908,000 children with SAM have been admitted into therapeutic feeding programmes for therapeutic nutrition support in six out of the seven countries. More than 98% of the reported SAM admission cases were from four countries (Somalia, Ethiopia, South Sudan, and Kenya) [3].

DISEASE OUTBREAKS: Multiple, frequent and concurrent disease outbreaks have been reported in the region resulting in an increased morbidity and mortality. Disease outbreaks reported in the region include cholera, measles, meningitis, malaria, dengue fever, hepatitis E, polio (cVDPV2) and anthrax. During the reporting period, three of the countries (Ethiopia, Kenya, and Somalia) are experiencing active cholera outbreak with a large number of cases reported in the area where the three countries share borders (Mandera Triangle).

Flooding, which has been reported in Somalia, Ethiopia, and Kenya since the start of short rains in March, and caused displacement of thousands of people, hundreds of injuries, and deaths, is expected to increase the risk of transmission for common water and vector-borne diseases such as cholera and malaria due to poor water, hygiene, and sanitation conditions in the countries, as well as an increase in vector breeding sites.

Dengue fever in Sudan, where a new outbreak was reported in February 2023 in Khartoum State, hepatitis E (South Sudan, Sudan), and meningitis (Ethiopia) are among the other current disease outbreaks [3, 10, 11].

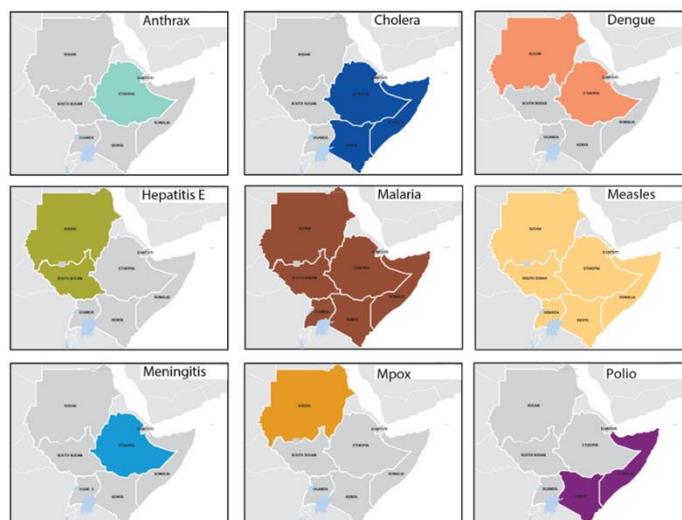


Figure 2: Summary of selected disease outbreaks in the GHOA region as of 30 June 2023 [11].

DISPLACEMENT: Many pastoral and agro-pastoral communities in the Horn of Africa rely on livestock breeding and production. Arid and semi-arid lands (ASALs) characterize parts of the region, which are prone to recurring droughts and severe climate shocks. When the region was hit by a severe drought, some families used increasingly desperate coping strategies to survive, such as leaving their homes and moving to other places in search of food, water, pasture, and alternative livelihoods, both within borders and to neighbouring countries, putting additional strain on already limited basic services.

Currently, more than 16.1 million internally displaced persons (IDPs), refugees, and asylum seekers (as of May 31, 2023) are recorded in the region. Of the 16.1 million, 11.6 million were IDPs, and 4.5 million refugees and asylum seekers, including over 2.3 million new IDPs because of the drought in the Horn of Africa. Sudan's most recent conflict (which began on 15 April 2023) resulted in an additional 2.9 million displacements, including around 2.2 million IDPs, and over 690,000 individuals crossed into neighbouring countries [4].

EXTREME WEATHER:

After 5 consecutive seasons of below normal rains, the Horn of Africa was back to its normal pattern during the long rains this year from a precipitation standpoint. While there was some respite for pastoral and agropastoral communities from improved rainfall earlier in 2023, several regions including Somalia, Ethiopia, Kenya, Sudan, and South Sudan suffered from flooding, causing displacement of populations and disruptions to healthcare services. Predictions suggest a high likelihood of El Niño, which is often characterised by various extreme weather events, such as droughts, floods, and heatwaves, all of which are expected to exacerbate the existing health situation [12, 6].

The El Niño is anticipated to bring above-average rains to the eastern parts of the region from October to December, affecting areas like Northern Kenya, Southern Ethiopia, and Somalia; conversely, western parts including South Sudan, Sudan, and western Ethiopia are likely to experience below-average rains from July to September due to El Niño, potentially intensified by the Indian Ocean Dipole global weather phenomenon [12, 6].

The WHO PHSA for El Niño covering the period between July to September 2023 suggests that six out of the seven GHOA countries are at very high risk of facing health impacts while only Djibouti is classified as high risk [12, 6]. Some of the anticipated impacts are increases in malnutrition cases, vector borne diseases (malaria, dengue and rift valley fever), water borne diseases (cholera, AWD) and vaccine preventable diseases like measles [12, 6].

Population mortality

Crude mortality rates increased from 2020 to 2021 in almost all countries in the GHOA region, aside from Sudan and Uganda, which showed minimal change (table 4). This increase in mortality is likely largely attributed to mortality linked to the COVID-19 pandemic. For example, in **Somalia**, 12,918 deaths in 2020 and 22,542 deaths in 2021 were estimated to have been directly and indirectly attributable to COVID-19 [13].

Based on Global Burden of Disease data, top causes of death in the GHOA region in 2019 included lower respiratory infections (among the top five causes of death in all GHOA countries), diarrheal diseases (among the top five causes for five GHOA countries), and drug susceptible tuberculosis (TB) (among top five causes in five GHOA countries) [14]. These data are from well before declaration of the drought emergency in 2022. Since 2019, in the GHOA region, there has likely been an increased proportion of deaths attributed to protein-energy malnutrition, due to subsequent consecutive periods of drought; diarrheal diseases, due to global cholera resurgence and poorer health outcomes due to malnutrition; and respiratory infections and COVID-19.

Drought related mortality estimates conducted in **Somalia** by the London School of Hygiene and Tropical Medicine (LSHTM) in collaboration with WHO, UNICEF and MOH, indicated that the drought crisis caused an estimated 43,000 deaths in in 2022 (half of which occurred in children under 5) and a projected between 18,100 and 34,200 deaths from January to June 2023 (an estimated 135 people dying each day due to the crisis); more severe than the 2017-2018 drought crisis [15].

Table 3: Key national mortality indicators in the seven countries in the GHOA region. Life expectancy at birth as of 2022, crude mortality rate as of 2021 [16, 17]. (Data for Kenya from 2022 Demographic Health Survey (except for crude mortality rate) [18]. Trend based on reported data compared to previous reporting period: → = no change, ↓ = decrease, ↑ = increase.

Country	Life expectancy at birth (years)	Crude mortality rate (per 1000 people)
Djibouti	62.9 ↑	9 ↑
Ethiopia	65.6 →	7 ↑
Kenya	62.1 ↑	8 ↑
Somalia	56.1 ↑	12 ↑
South Sudan	55.6 →	11 ↑
Sudan	65.6 →	7 →
Uganda	63.6 →	6 →

Country Summaries

Djibouti

The prolonged drought, additional local and global shocks, and high food prices all had a significant impact on Djibouti's food security and nutritional status in 2023. According to the most recent IPC analysis, 250,000 people (or 21% of the population assessed, out of a total of more than 1.18 million people) were in acute food insecurity (IPC Phase 3 or above) situation between March and June 2023. A total of 164,000 people were in Phase 3, crisis, and 86,000 (7% of the population) were in Phase 4, emergency. The rural population has experienced a high frequency of acute food insecurity despite the food aid provided by the Ministry of Social Affairs and humanitarian partners due to a lack of dietary diversity, poor purchasing power, and limited livelihood activities.

Projections for the period from July to December 2023 indicate the drought situation is likely to persist with very high temperatures and seasonal movement of pastoralists households. In the absence of food assistance, it is estimated that around 285,000 people, representing 24% of the population analyzed, will be acutely food insecure (IPC Phase 3+ or severe food insecurity). Of this population, nearly 100,000 people will be in IPC Phase 4 (emergency situation). According to these figures, the number of people experiencing high level of food insecurity has increased by 47% in 2023 compared to the same period in 2022.

The second half of 2023 will be marked by a continuation of the drought situation, and this is expected to worsen the acute malnutrition situation in the country. Between January and December 2023, 33,000 children under the age of five and 2,900 pregnant and lactating mothers are projected to experience acute malnutrition, with more than 5,500 of those children projected to be severely malnourished [19].

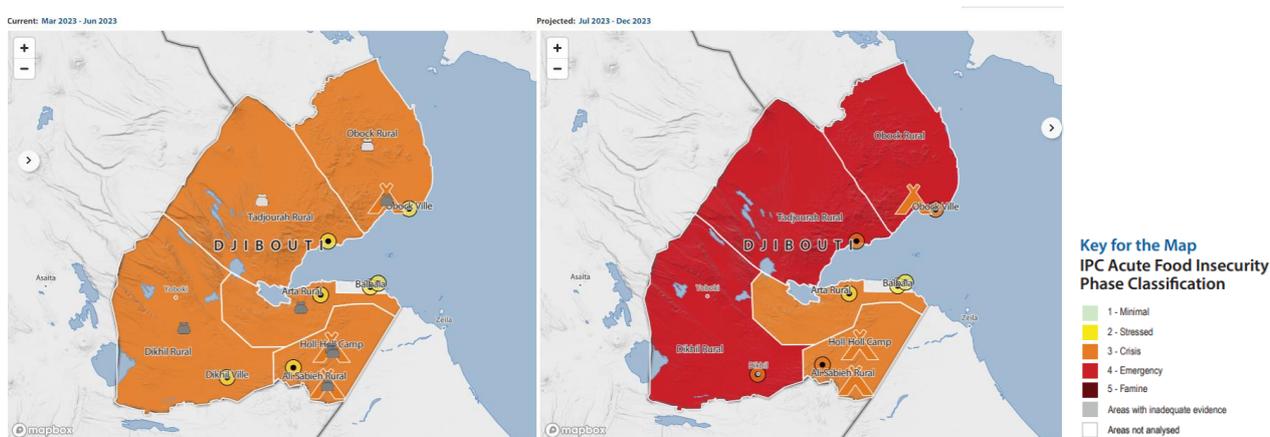


Figure 3: Current (Mar-Jun 2023) (left) and Projected (Jul-Dec 2023) (right) Food Insecurity situation, Djibouti [19].

Due to weakened population immunity from under-nutrition, and poor water, hygiene, and sanitation conditions, especially in drought-affected areas, outbreaks of multiple epidemic-prone diseases, including measles, malaria, dengue fever, and increased cases of acute watery diarrhea (AWD), continued to affect the vulnerable population.

Ethiopia

Ethiopia is one of the most drought-prone nations in the world, with extreme vulnerability to climatic shocks [20]. Due to the unsuccessful five rainy seasons, the country experienced a severe drought affecting millions of people. Displacement due to conflict, intercommunal violence, natural disasters, and climate change continues affecting various regions and increases the level of humanitarian needs. As per the humanitarian response plan for 2023, approximately, 20.1 million people need of humanitarian aid, with about 13 million of them living in drought-affected areas [7]. The problem gets worse with each failed rainy season, which has a terrible impact on pastoral communities, especially in the eastern and southern parts of the country.

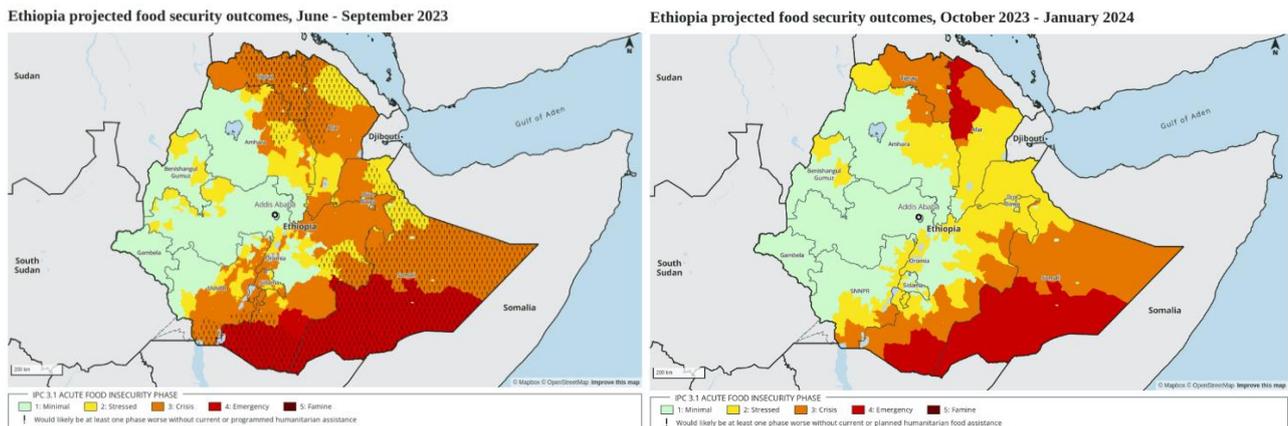


Figure 4: Current (Jun - Sept 2023) (left) and Projected (Oct 23 - Jan 24) Acute Food Insecurity Classification, FEWS NET. Ethiopia [21].

The demand for food aid is anticipated to be at its highest from June through September 2023. For the second straight year, needs are not only at historically high levels, but food consumption gaps in northeastern, eastern, and southeastern parts of the country range in size from considerable to extreme level. The degradation of livelihoods during the prolonged shocks has slowed the recovery of food and income sources, even if conflict in the north and the drought in the south and southeast have receded. The level of need remains most severe in areas impacted by conflict in the north and drought in the pastoral south and southeast. Typical food and income from crop and livestock production remain very low in these areas, leaving very poor and displaced households to subsist on atypical coping mechanisms, including heavy reliance on community support [7, 22].

It is anticipated that nearly 4.2 million children are suffering from acute malnutrition during the year, with 1.2 million of those children experiencing severe acute malnutrition. Similarly, an estimated 1 million pregnant and lactating women are malnourished. Nearly 360,000 children under the age of five were admitted for treatment of severe acute malnutrition this year between January and June showing an increased trend in comparison to the same period of 2022. Additionally, more children with SAM and medical complications are being admitted to stabilization centers across the regions. In the months of January to June 2023, an increase of 27.1% in admissions in the stabilization centers compared to the same reporting time in the previous year 2022. High numbers of admissions were observed in the regions of Oromia, Somalia, South Ethiopia, Amhara, Central Ethiopia and then Afar. The magnitude of the change between the two years has been observed in Gambella (179.8%) being the highest, followed by Benishangul Gumuz (148.5%) and last in Tigray (108.4%). a number of regions, with Tigray, Benishangul Gumuz, Southern Nations, Nationalities and Peoples (SNNP), Afar, and Oromia regions reporting the largest numbers [23, 24].

Severe food insecurity, acute malnutrition, and poor water, hygiene, and sanitation conditions are expected to deteriorate the health situation by increasing the likelihood of epidemic-prone disease outbreaks including cholera, measles, meningitis, malaria, dengue fever and anthrax which already are ongoing.

More than 11,000 cholera cases and 165 deaths were reported in 2023 (as of 28 June), with over 96% of the cases reported from drought affected regions of Oromia, Somali, Afar and SNNP. Several regions were affected by a measles outbreak in 2023. Over 10,614 cases and 100 deaths were reported this year and as of 29th of June, the highest number of cases were recorded in Somali, Oromia, SNNP, and Amhara regions [3].

In response to the cholera outbreak, reactive vaccination campaigns were conducted with nearly two million (1,997,328)(99% of target) people one year and above were vaccinated with OCV in Oromia and Somali regions in January and May 2023. Nationwide preventive measles vaccination campaign was conducted integrated with nutritional screening and vitamin A administration, routine catch up and COVID-19 vaccination in December 2022 and over 14.5 million children from 9-59 months old were vaccinated. Additionally, reactive vaccination campaigns were conducted in Amhara, Oromia and Somali regions to respond to new outbreaks in July 2023. [25].

Other key challenges experienced include limited access to conflict affected areas, lack of health partners in some locations, influx of refugees from Somaliland and suspension of preventive nutrition interventions like general food distribution, targeted supplementary feeding programme and blanket supplementary feeding program.

Kenya

According to the IPC analysis conducted in February 2023, unprecedented deterioration in the country's food security situation, with over 5.4 million people(32% of analyzed population) experiencing high levels of acute food insecurity (IPC Phase 3 or above), of which 1.2 million people (7%) were likely to be in Emergency (IPC phase 4) between March and June 2023. These represented the highest magnitude and severity of acute food insecurity in the ASAL areas in years.

Seven counties out of the 23 analysed, predominantly characterised by pastoral livelihoods, were the most affected, representing 45% or higher of their total population in IPC Phase 3 (Crisis) or above: Samburu (45%), Tana River (45%), Turkana (50%), Garissa (55%), Mandera (55%), Marsabit (55%) and Wajir (55%) [19].

Acute malnutrition across the ASAL counties had significantly deteriorated over the past seasons showing a great concern in comparison to the same period of the previous year. Laisamis in Marsabit County and Turkana South were classified in Extremely Critical levels of Acute Malnutrition (IPC AMN Phase 5 - GAM WHZ \geq 30 percent) and Samburu, Mandera, Garissa, Isiolo, Turkana West, Turkana Central, Turkana North, Tiaty Sub-County in Baringo, North Horr and Moyale sub-counties in Marsabit County in a Critical situation (IPC AMN Phase 4 - GAM WHZ 15 to 29.9 percent), while West Pokot, Laikipia, Tana River and Wajir were in Serious phase (IPC AMC Phase 3 - GAM WHZ 10 to 14.9 percent). The major contributing factors in the worst affected areas were low milk availability, WASH, high disease burden and suboptimal multisector interventions to address the needs, compounded by insecurity [19].

Projections from July to September 2023 (coinciding with the harvest season for Agropastoral livelihoods and the lean season for pastoral livelihoods), estimated that approximately 2.8 million people (17 percent of the ASAL population) are classified in high levels of acute food insecurity (IPC phase 3+) with 2.3 million people are in Crisis (IPC Phase 3) and close to 500,000 people in Emergency (IPC Phase 4). In comparison to the last analysis, there has been a general improvement across the ASAL counties, from 5.4 million people in high levels of acute food insecurity during March to June 2023 to 2.8 million for July to September 2023. This improvement largely results from a good harvest across the ASAL counties supported by a favourable rainfall.

However, a combination of shocks continues to hinder many households' food security, in particular high staple food prices catalysed by rising inflation, loss of livestock, destruction of infrastructure, property, and farmland due to flooding as well as the localised resource-based and human-wildlife conflict [26].

The nutrition situation has improved in most arid counties. Marked improvements were observed in Laisamis as reflected in the decrease in the prevalence of Global Acute Malnutrition (GAM) from 30 percent in July 2022 to 8 percent; Nort Horr from 29.7 percent in July 2022 to 22.5 percent in July 2023; Turkana North from 38.8 percent in July 2022 to 23.7 percent in July 2023 and Turkana South from 41.4 percent in July 2022 to 32.7 percent July 2023.

These improvements are attributed to drought response and the long rains from April 2023. Despite these improvements, acute malnutrition rates continue to be high and above the emergency threshold in most arid counties, primarily attributed to the compounded adverse impacts of the prolonged drought that negatively affected food security, water, hygiene and sanitation, and disease [26].

Turkana County remains a hotspot of acute malnutrition IPC Acute Malnutrition [AMN] Phase 4 or above) with Extremely Critical, IPC Phase 5 and GAM (by WHZ) of over 30 percent observed in Turkana South, despite significant humanitarian food assistance. Similarly, high levels of acute malnutrition are observed in other ASAL Counties such as Marsabit (North Horr, and Laisamis), West Pokot, Mandera, Wajir, Garissa, Tana River, Samburu, East Pokot in Baringo County, and Isiolo, currently experiencing IPC AMN Phase 4, Critical, and GAM WHZ 15 to 29.9 percent [26].

Nearly one million children under five are estimated to be suffering from acute malnutrition with 243,000 expected to be severely malnourished in 2023. As of 30 June 2023, more than 77,000 children with severe acute malnutrition have been admitted for therapeutic feeding program, which is a 36% increase in SAM admissions compared to the same period in 2022.

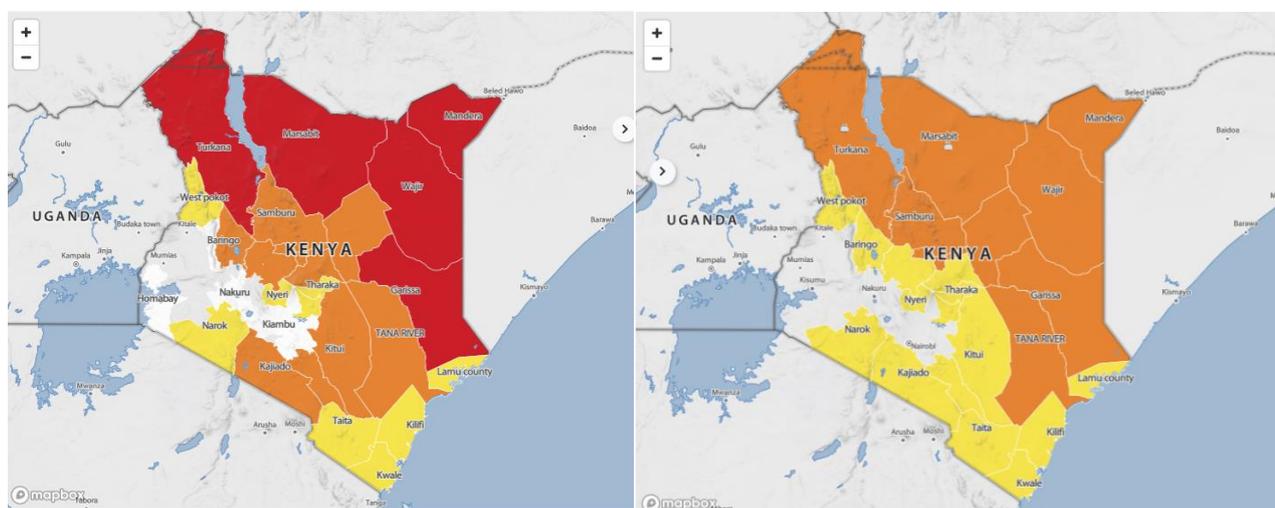


Figure 5: Current (Apr-Jun 2023) (left) and Projected (Jul-Sep 2023) (right) Food Insecurity situation, Kenya [26].

In addition to the worsening acute malnutrition situation, Kenya has also been affected by multiple disease outbreaks including cholera and measles, a neglected tropical disease (Leishmaniasis) as well as a zoonotic disease (anthrax). The cholera outbreak started in October 2022 and has affected 25 counties with over 15,000 cases and 192 deaths as of 30 June 2023. Most of the cholera cases have been reported from drought affected counties (namely Mandera, Garissa, and Wajir) contributing for over 50% of the reported cases in 2023.

A measles outbreak, the most common vaccine preventable disease, affected a total of nine counties in 2022 and 2023, with more than 1,026 cases and 10 deaths reported as of June 2023.

As part of the outbreak response measures, over 1.1 million children under five were vaccinated for measles and more than 2 million people with one year and above were vaccinated with single dose OCV vaccine in selected high-risk counties in February 2023 [3].

Somalia

Somalia is one of seven countries in the GHoA region that have been severely impacted by drought and food insecurity due to failed rains for five consecutive seasons. The country's humanitarian situation is grave. It was anticipated that 6.6 million people in Somalia would continue to face severe acute food insecurity that is classed as IPC Phase 3 crisis and above until June 2023, despite modest improvements in the country's humanitarian crisis.

The three areas (Mogadishu IDPs, Baidoa IDPs, and Burhakaba Agropastoral) that were identified as being at risk of famine in the most recent IPC Analysis in January 2023 have shown a significant decrease in the population in IPC Phase 5 (Catastrophe) from 194,000 to around 12,000 with additional decreases in the population in IPC Phase 4 (Emergency) and are no longer at risk of famine. However, the IPC analysis projected that the number of people estimated to be in crisis (IPC Phase 3) and above was expected to increase from 30% in the first quarter of 2023 to 39% between April and June.

Similarly, the estimated number of people in emergency (IPC Phase 4) increased from 8% in March 2023 to 10% in the second quarter of 2023 [27]. Nutrition surveys conducted in March 2023 highlighted that those high levels of acute malnutrition are expected in many areas, with most population groups facing Critical (IPC AMN Phase 4) or Serious (IPC AMN Phase 3) levels of acute malnutrition through June 2023. Accordingly, an estimated 1.8 million children under the age of five years in Somalia will suffer from acute malnutrition in 2023, including 477,700 who are projected to be severely malnourished.

The main drivers of acute malnutrition and mortality are household-level reductions in food and milk consumption, disease outbreaks (including AWD, cholera, and measles) and associated high levels of morbidity among children, limited health and nutrition services, and persistent underlying causes related to poor sanitation and health [27].

Over 310,000 children under five were treated for SAM in 2023 (as of 30 June), which is over 38% increase in SAM admissions compared to last year, and this was the highest number of SAM admission recorded since 2018 [3].

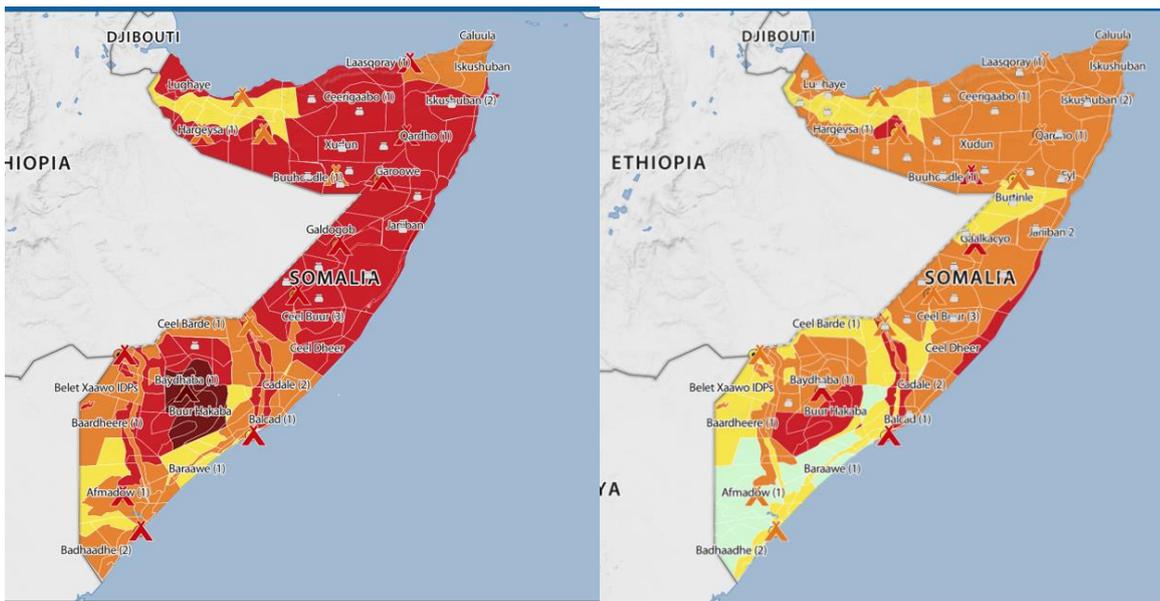


Figure 6: Projected (Jul-Dec 2022) (left) and current (Apr-Jun 23) (right) Food Insecurity situation, Somalia [27].

In addition, the country is currently dealing with outbreaks of diseases that can be prevented by vaccination, such as measles and polio (cVDPV2), as well as outbreaks of waterborne diseases like cholera and acute watery diarrhea. Pockets with low vaccination coverage, poor access to clean water and sanitation, limited functional healthcare facilities, and lack of resources for surveillance and response to alerts are contributing the ongoing disease outbreaks in the country.

A widespread cholera outbreak continued to affect the country with over 27,685 cases reported since January 2022 including a total of 9,768 cases and 29 deaths (Case fatality rate (CFR): 0.3%) reported this year, as of 30 June 2023. The country is also affected by a measles outbreak that has been ongoing for over two years. A total of 20,447 cases have been reported in 2022 and 2023 (as of June), of which 3,354 cases were reported between January and June 2023 indicating a slight decline in the number of cases this year compared to last year. The most affected regions in 2023 are Bay, Banadir and lower Shabelle, and over 68% of reported cases are children under five years, which reflects low measles vaccination coverage in these regions. In response to the cholera outbreak, a total of 1.4 million people were vaccinated targeting 15 drought affected areas in January 2023 [3].

South Sudan

Conflict and insecurity, climatic and economic shocks, food insecurity, and other public health challenges continue to drive humanitarian needs in South Sudan [28, 29]. Impacts of the Sudan crisis are exacerbating the already fragile security and humanitarian situation in the country, straining scarce humanitarian, food, and health system resources; driving up market prices, including for staple foods; and aggravating existing drivers of conflict [28, 30, 31]. Impacts of population movement from Sudan are particularly being felt in northern counties; as of 30 June 2023, since the escalation of violence, an estimated 143,000 people have crossed from Sudan into South Sudan, with South Sudanese returnees comprising more than 91% [28, 32].

Key drivers of high levels of food insecurity in the country are economic decline, due to depreciation of local currency and impacts of conflicts in Ukraine and Sudan; climatic shocks, including floods and prolonged drought; and persistent conflict and insecurity [33, 34].

In South Sudan, **7.8 million** people (**63% of the population**) are estimated to be experiencing high levels of acute food insecurity (IPC Phase 3+) from April to July 2023; with onset of the lean season, this is a 12% increase in the population affected compared to the first quarter of 2023 [3, 34]. 43,000 people are likely to be in Catastrophe (IPC Phase 5) in Akobo, Canal/Pigi and Fangak counties of Jonglei State, and Leer and Mayendit counties of Unity State, and 2.9 million people are facing Emergency levels (IPC Phase 4) across the country [34]. The situation is expected to worsen with drier than usual conditions forecasted for Aug-Oct 2023 [35]. Over the past five years, there appears to be a gradually increasing trend in seasonal averages for the population proportion facing high levels of acute food insecurity in the country.

Reported SAM admissions have increased since the beginning of 2023 [3], and an estimated 1.4 million children under five are acutely malnourished with approximately **346,000 requiring SAM treatment**, and **1.1 million needing moderate acute malnutrition (MAM) treatment** in 2023 [3, 34]. Nearly 148,000 children under five were admitted to nutrition programmes for SAM management this year as of 30 June 2023; this is an elevated number compared to the same period in the last three years [10]. 61% of the malnutrition burden is highly concentrated in Jonglei, Upper Nile, Unity and Warrap States and the highest SAM admissions were from Jonglei, Northern Bahr el Ghazal, Unity and Warrap and Lakes states respectively [3, 34]. Additionally, a total of 737,812 pregnant and lactating women are likely to be acutely malnourished during the same period. [10]. The situation **did not show much improvement during the post-harvest season** (February – March 2023), and has likely **deteriorated during March – June 2023** period (lean season), with an estimated 59 counties expected to be facing IPC AMN Phase 3+ levels of acute malnutrition (this is comparable to the lean season of the previous year) [34, 36].

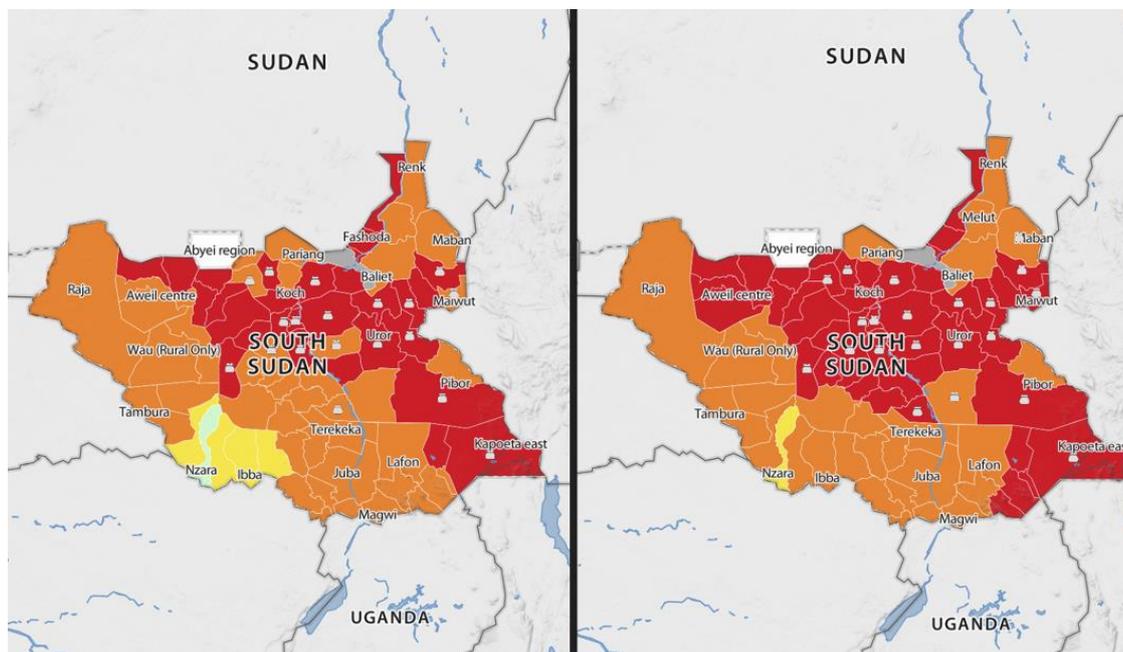


Figure 7: Projected Acute Food Insecurity situation (Dec 22-Mar 23) (left) and Apr – Jul 2023) (right), South Sudan [34].

A **cholera** outbreak was declared in March 2023 after two patients tested positive for V. Cholerae (PCR) in Malakal County, upper Nile state. A total of 1,471 cases and 2 deaths (CFR: 0.3%) were reported in 2023 (last cases reported on 16 May 2023). The outbreak affected both Malakal town and Malakal POC (protection of civilians) camp. An OCV campaign was conducted in March 2023 with 54,538 people being vaccinated (82%). As of June 30, 2023, no new cholera cases have been reported and the outbreak is controlled [3].

A **measles** outbreak was declared by the Ministry of Health on the 10th of December 2022. A total of 6,347 cases were reported (4,137 in 2022 and 2, 210 in 2023), affecting 37 counties, with 66 deaths (CFR: 1.0%), out of which 4,589 cases (72.3% of the cases) were children under five years. Nationwide and selected reactive measles vaccination campaigns were conducted between January and May 2023 and over 3.2 million children were vaccinated [3]. The influx of people into South Sudan fleeing the Sudan crisis is overstressing facilities, particularly in the northern Renk, seeing an **upsurge in cases of acute watery diarrhoea, measles, and SAM among children** [37]. Additionally, the country experienced ongoing outbreaks of hepatitis E and malaria.

Despite the drier than usual conditions forecasted, as the country enters peak rainy season (roughly June to September [38]), and with the continued displacement related to the Sudan crisis, there is a heightened risk of disease transmission, particularly for water-borne and vector-borne disease outbreaks.

Sudan

On 5 June 2023, WHO graded the escalation of violence in Sudan as a Grade 3 public health emergency [10]. The ongoing conflict is further exacerbating the food insecurity, malnutrition, and health crises in the country. The conflict has led to disruptions of essential services, medicines, supplies, and food and non-food items (NFI); increased food and market prices; and caused damage to health, WASH, and communications infrastructure, further isolating the population’s access to lifesaving essential livelihood, health, and nutrition services. [39]. Consequently, people in Sudan are facing an increased risk of morbidities and mortalities related to communicable diseases (measles, cholera), vector borne disease (malaria, dengue fever), malnutrition and maternal and child health related diseases due to disruptions of health services, routine surveillance and laboratory services and the depletion of available resources and commodities [10].

The escalation of violence has displaced an estimated 2.9 million people as of 28 June 2023, including 2.2 million internally and close to 700,000 to neighbouring countries [40]. As per Federal Ministry of Health Sudan, over 11,000 people were injured and over 1,100 died as a result of direct impact of violence. As of end of June 2023, Federal EOC classified 7 States in response mode and 11 States in alert mode.

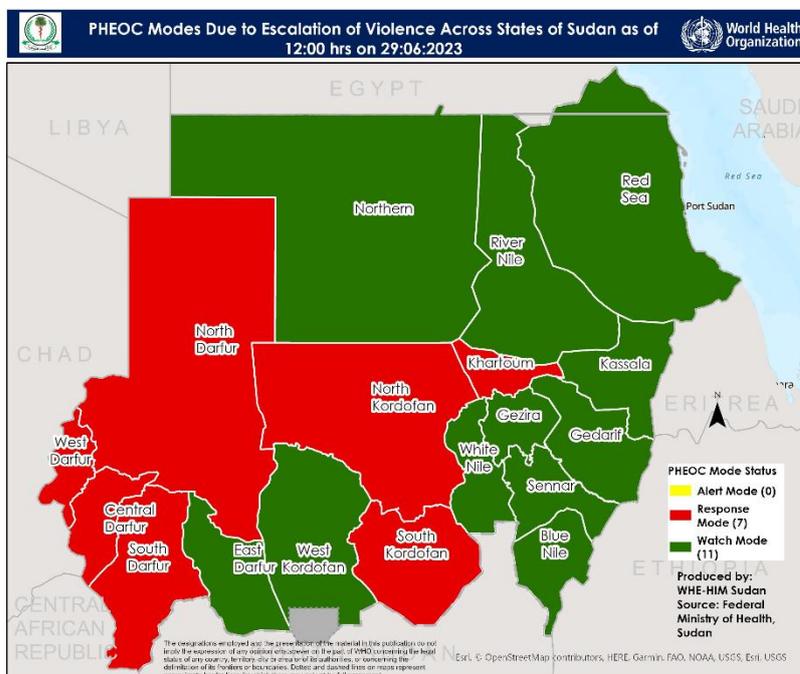


Figure 8: Public health emergency operation centre (PHEOC) modes due to the escalation of violence across the states, 29 June 2023, Sudan. [41]

Conflict and insecurity, high food prices, and climate shocks are key drivers of the food insecurity crisis in Sudan [39]. By June 2023, over **16.9 million** people in Sudan were experiencing high levels (IPC Phase 3+) of acute food insecurity and the number is projected to increase to **over 20.3 million** (42% of the assessed population) between July and September 2023, including 6.3 million people (13%) experiencing Emergency levels (IPC Phase 4). The reasons for an increase are related to the forecasted below average main rainfall season (March to October) [38] impacting crop production and livestock, combined with the ongoing conflict, soaring food prices, and worsening economic crisis [39].

States with active conflict are most affected, with more than half the population experiencing crisis levels or worse (IPC3+) in each of West Darfur (62%), Khartoum and South Kordofan (56% IPC Phase 3+), and Central, East, and South Darfur, and West Kordofan States (53%) [39]. Over 15 million people (31% of the assessed population) are projected to be highly food insecure (IPC Phase 3+) from October 2023 to February 2024, with 3.8 million (8%) experiencing emergency levels (IPC Phase 4); **these are the highest levels of food insecurity on record during the country’s main harvesting season** [39]. Greater Darfur, Greater Kordofan, and Khartoum States will remain the most affected.

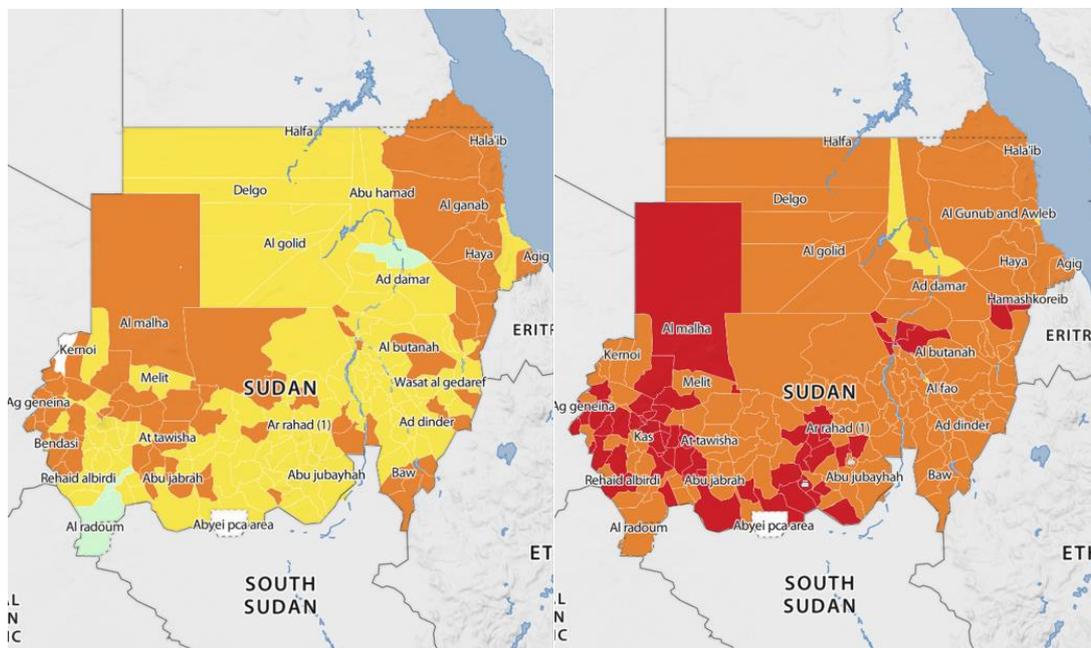


Figure 9: Projected food insecurity situation (Oct 22 - Feb 23) (left) and Jul-Sep 23 (right), Sudan [39].

Approximately **3.4 million children under five** are suffering from acute malnutrition in 2023. This includes over 690,000 children severely malnourished and 103,598 children in need of in-patient management in the stabilization centres [42]. Four million children, and pregnant and breastfeeding women are acutely malnourished [10]. The deterioration of the nutritional situation has led to an estimated 30% increase in the number of children with acute malnutrition in hotspot areas, a 15% increase in IDP hosting states and a 10% increase in other localities compared to the pre-crisis level [10, 43]. As a result of the ongoing conflict, suspension of aid has disrupted treatment programmes for 50,000 children suffering from SAM and vital nutrition supplies have been destroyed, including a factory producing 60% of the ready-to-use therapeutic and supplementary food used by UNICEF and WFP to treat acutely malnourished children [43, 10].

Sudan was dealing with multiple disease outbreaks including dengue fever, measles, hepatitis E, Mpox, malaria and circulating vaccine derived polio virus type 2(cVDPV2) before the violence broke out and the escalation of violence since mid- April 2023 has exacerbated the pre-existing outbreaks and heightened the risk of further spread. There is an **increased risk of outbreaks of water-borne and vector-borne diseases**, compounded by damage to critical WASH infrastructure, barriers to accessing safe water, challenges in waste management and interruption of vector control efforts due to the conflict [10]. Additionally, although lower than average rainfall is predicted for much of Sudan [35], the coming rain and flood season brings a seasonal increased risk of water-borne and vector-borne diseases [38]. In particular, wetter than usual conditions are forecasted for western Sudan [35], which has a high proportion of displaced populations, including those fleeing to neighboring Chad, further increasing outbreak risk factors [40].

Ten states and 20 localities have been affected by **measles outbreaks** in 2022 and 2023. A total of 2,069 suspected and 238 confirmed measles cases were reported between Jan and June 2023, 86% of the measles cases were below 10 years, and 34% have never received a measles vaccine. Over 38,000 children under five were vaccinated with measles vaccine from Blue Nile state between May and June 2023 [44].

Malaria contributed to 11% of morbidity from total consultations in the first week of March 2023 and the epidemic threshold for malaria was crossed in four states (East Darfur, Kassala, Gezira and South Darfur) in the same period. A total of 489,856 malaria cases and 23 deaths were reported in all the states in the 1st quarter of the year 2023 and much higher number was expected in the 2nd quarter despite a weak surveillance and reporting system due to the conflict.

Sudan was also affected by dengue fever outbreak, which started in July 2022 with a total of 8,530 cases (2,730 confirmed) and 45 deaths since the onset of the outbreak. 12 states reported cases of dengue fever with 28% of the cases from Khartoum State followed by 18% from North Kordofan and 17% from North Darfur. This was the first time that a dengue fever outbreak was reported in Khartoum State – an urban outbreak which affected a significant number of people. Additionally, 300 cases of **acute watery diarrhoea** have been reported, with at least one case testing positive on rapid diagnostic test (RDT), but lab confirmation(culture) not possible due to disruptions in sample collection and testing capacity. However, the response to the outbreak is ongoing to save more lives. Between 21 May and end of June 2023, there were 69 alerts for measles (957 cases, 22 deaths);10 alerts for malaria (323 cases); 1 alert for AWD (277 cases) among others.

Uganda

Climate related shocks, including erratic and poorly distributed rainfall and flash floods, and endemic crop pests and livestock diseases have contributed to below average food and livestock production over the last three years leading to widespread food insecurity in the Karamoja region and neighboring districts, which are worsened by a fragile security situation [45].

Nearly half, 45%, of the population (582,000) people in the Karamoja region are experiencing high levels of acute food insecurity (IPC Phase 3+), with 102,000 people (8%) in an emergency (IPC Phase 4) between April and August 2023 [45]. The food security situation has progressively deteriorated year over year, compared to annual seasonal averages, due in part to localized insecurity, loss of livestock, limited access to farmland, below average harvest season productions, and high market prices contrasted with low household income [45]. The situation is projected to slightly improve for the September 2023 – February 2024 period, following the main harvest season [45].

However, the lean season in Karamoja, which typically ends by July, has been prolonged due to below average rainfall and production constraints, delaying first season harvests, which are predicted to be at below average levels [46]. Consequently, staple food prices in the region remain above the five-year averages [46]. Additionally, drier than usual conditions are forecasted for Aug-Oct 2023 in Northern Uganda [35].

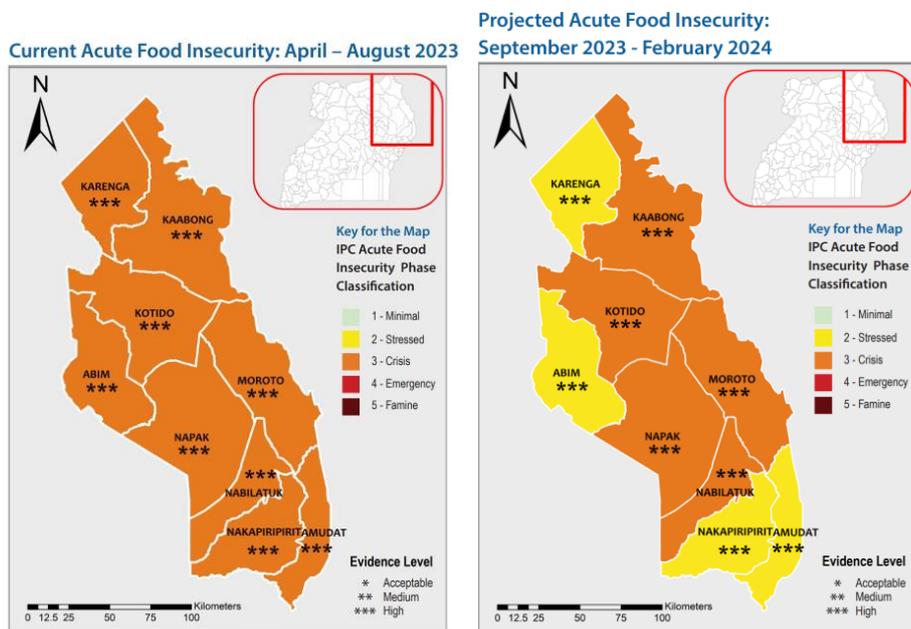


Figure 10: Current (April-Aug 23) (left) and Projected (Sep 23 - Feb 24) Food Insecurity situation in Karamoja region of Uganda [45].

Recurrent high levels of food insecurity, high burden of diseases including diarrheal diseases and malaria, inadequate access to safe water and sanitation, anaemia among children and pregnant and lactating women (PLW), and a high burden of work on mothers have contributed to high levels of acute malnutrition, particularly affecting women and children [47]. IPC projections for February 2023 to January 2024 estimate that more than 89,000 children under 5 years and 10,000 PLW are likely to be acutely malnourished in Karamoja region, with approximately 19,600 suffering from SAM. Kaabong district is facing critical levels of acute malnutrition (IPC AMN Phase 4) with a GAM prevalence of 18% [47]. At the national level, nearly 37,000 SAM children were admitted for nutritional support between January and June 2023 showing a 5% increase compared to the same period last year [3]. In Karamoja region, over 12,000 children under five were admitted for management of SAM from January to June 2023; an elevated number compared to seasonal levels from the past four years [3].

The acute malnutrition situation is concurrently worsened by and contributes to poorer infection outcomes related to a high prevalence of malaria and diarrheal diseases [47]. Two refugee hosting districts (Kiryandongo, Lamwo) registered measles outbreak from Sept/Oct 2022 to mid-January 2023 [3]. A total of 378 cases and one death (CFR: 0.3%) were reported [3]. A reactive vaccination campaign was conducted in affected districts for timely control of the outbreak [3]. Both outbreaks were reported to be controlled by June 2023 as there were no new cases reported after.

2. Health status and threats

Extreme Weather

Current Situation

Improved rainfall from mid-March brought some reprieve to pastoral and agropastoral communities. After 5 consecutive seasons of below normal rains, the Horn of Africa countries finally received rainfall in the second quarter of the year. although one rainy season is not enough to bring an end to the crisis. Thus, the humanitarian impacts will be felt for years to come. Moreover, while improved rainfall from mid-March to May brought some reprieve to pastoral and agropastoral communities, parts of Somalia, Ethiopia and Kenya experienced flooding which resulted in thousands of people being displaced in addition to hundreds of injuries, and deaths as well as the disruption of health facility services. Parts of Sudan and South Sudan had also been experiencing flooding for months. Over the coming months, a range of extreme weather events are expected, including droughts, floods, and heatwaves, which could all harm human health in the region.

Outlook

During **July to September 2023**, wetter than usual conditions are expected over northern and southern coastal parts of Somalia, south-eastern Ethiopia, cross-border areas of Ethiopia-Sudan South Sudan, and coastal Kenya. Western Kenya, Northern Uganda, much of Sudan and South Sudan, Northern Ethiopia and Djibouti are expected to be drier than usual conditions¹. During **August to October 2023**, wetter than normal conditions are expected for Southern and Eastern Ethiopia, Somalia, parts of central, eastern, and coastal Kenya and southern Uganda Drier than normal conditions are expected for parts of western Kenya, northern Uganda, much of South Sudan, central to northern Ethiopia, Djibouti, Eritrea, and much of Sudan.

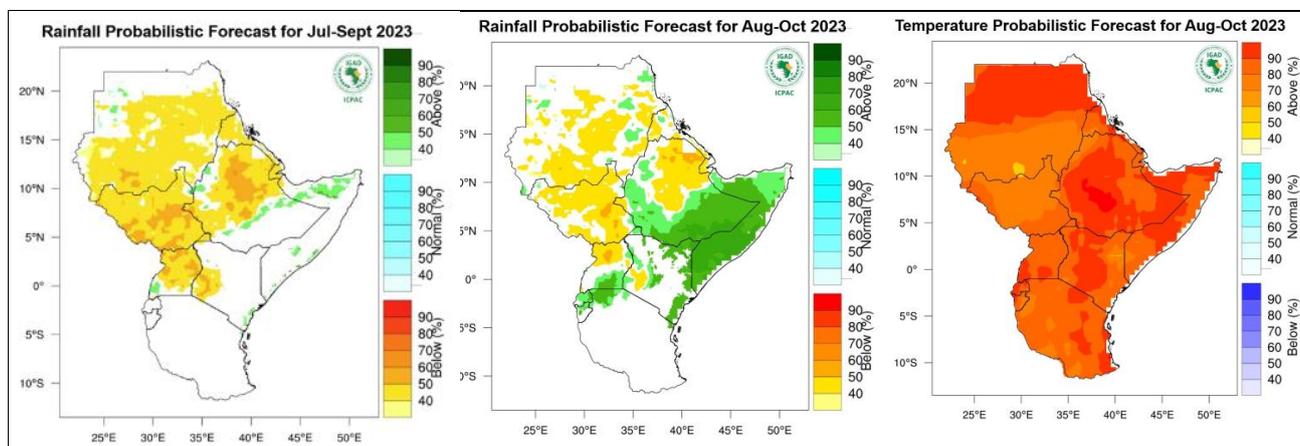


Figure 11: Rainfall forecast Jul-Sept 2023 and Aug- Oct 2023. (IGAD/ICPAC)

¹ Rainfall probabilistic forecast for July – September 2023. [July - September 2023 - ICPAC](#)

El Niño

It's a natural climate phenomenon that affects the weather patterns across the globe and especially the GHoA region. It is characterized by the warming of surface waters in the central and eastern equatorial Pacific Ocean. El Niño is typically associated with increased heat worldwide, as well as drought in some parts of the world and heavy rains elsewhere. El Niño's onset was revealed by the World meteorological organization on 4 July and will likely strengthen through the remainder of the year, resulting in above-average rains during the October–December rainy season across the eastern parts of the region, including much of Kenya, the Somali region of Ethiopia, and Somalia. Unlike in the Horn, El Niño is associated with below-average rains between July and September across western parts of the region, such as South Sudan, Sudan, and western Ethiopia and Kenya. The effect of another global weather phenomenon, the Indian Ocean Dipole, is also forecasted to be positive with above-average rains across the Horn of Africa and is likely to strengthen the impact of El Niño.

Public health impacts

Food production is highly vulnerable to both droughts and heavy rainfall; and therefore, El Niño conditions risk deepening food insecurity and malnutrition crises across the region, compounding infectious disease morbidity and mortality. Displacement, overcrowding, and disrupted access to vaccination associated with extreme weather events may contribute to continued risk of vaccine-preventable disease outbreaks, including polio, measles, and meningitis. Decreased access to WASH and health services will have negative impacts on maternal and child health and other essential health services. Added stressors and impacts on communities and livelihoods can exacerbate existing vulnerabilities and inequalities, leading to a higher risk of gender-based violence [6].

In **areas with above average rainfall** forecasted in the coming months (eastern parts of the region, including much of Kenya, the Somali region of Ethiopia, and Somalia), have a heightened risk of waterborne disease outbreaks including cholera and accentuated risks of vector borne diseases (e.g., malaria and dengue) due to favorable breeding sites for vectors. Flooding can result in the destruction of the road, WASH, and health infrastructure, introducing health care access barriers and disrupted supply chains for essential commodities and medicines. **Areas with drier than usual conditions** forecasted (western part of the region, including South Sudan, Sudan, northern Ethiopia, Djibouti, and parts of western Kenya) are likely to experience below average harvests, heat stress and associated exacerbation of non-communicable diseases including mental health conditions [6].

Food Insecurity

Current Situation

As of 30 June 2023, an estimated **59.8 million people, 27% of the assessed population**, are facing crisis levels of acute food insecurity and above (IPC Phase 3+) with **53.6 million in crisis conditions (IPC Phase 3), 6.2 million in emergency (IPC Phase 4)** and **83.4 thousand people** in parts of South Sudan and Somalia in the **catastrophe stage (IPC Phase 5)** [1].

Projections

The situation is expected to worsen with below average rains projected for August to September in eastern South Sudan and the drought situation will likely continue in Djibouti. In Sudan, the food insecurity is projected to worsen due to a forecasted below average main rainfall season, reaching the highest levels of food insecurity on record during the country's main harvesting season.

Below average rains are projected for August to September in central, southern, and southwestern Ethiopia. Somalia and parts of Kenya may see improved conditions, in part due to projected above average rains. The food security situation is projected to temporarily improve in Uganda due to the main harvest season, however drier than usual conditions forecasted in Northern Uganda for August to October 2023.

Malnutrition

A record level of SAM admission was reported in the Horn of Africa countries in the first semester of 2023 compared to the last five years. More than **2.7 million children under five** received treatment for SAM from January 2022 to June 2023 with highest numbers coming from Ethiopia, Somalia, and South Sudan [33]. In **Somalia, Kenya, and Ethiopia**, SAM admission trends from January to June 2023 have been well above reported annual averages for the same period of previous years [48]. SAM admission trends for January to June 2023 in South Sudan and Karamoja Region, Uganda, have been above pre-2022 annual averages for the same period [48]. Data are not available for Sudan or Djibouti. **As much of the region moves through lean season, surges in malnutrition admissions are expected in most GHOA countries** [33, 48].

In the first semester of this year, there were over **118,000 more SAM admissions (62% increase)** in **Somalia** (January to June 2023), over **27,800 more admissions (56% increase)** in **Kenya** (January to June 2023), and close to **29,000 more admissions (9% increase)** in **Ethiopia** (January to June 2023), compared to the same period last year. In Ethiopia, SAM admission trends have shown a concerning increasing trend in the North, particularly Amhara and Afar regions [49].

In **Kenya**, according to the demographic and health survey conducted in 2022, 18% of children under five are stunted, 5% are wasted, and 10% are underweight [18]. While the prevalence of stunting has improved, the prevalence of wasting and underweight have remained roughly the same in the past five years [18]. In **Djibouti**, the European Civil Protection and Humanitarian Aid Operations (ECHO) reports that malnutrition rates have doubled compared to the previous year in at least one health centre visited [50].

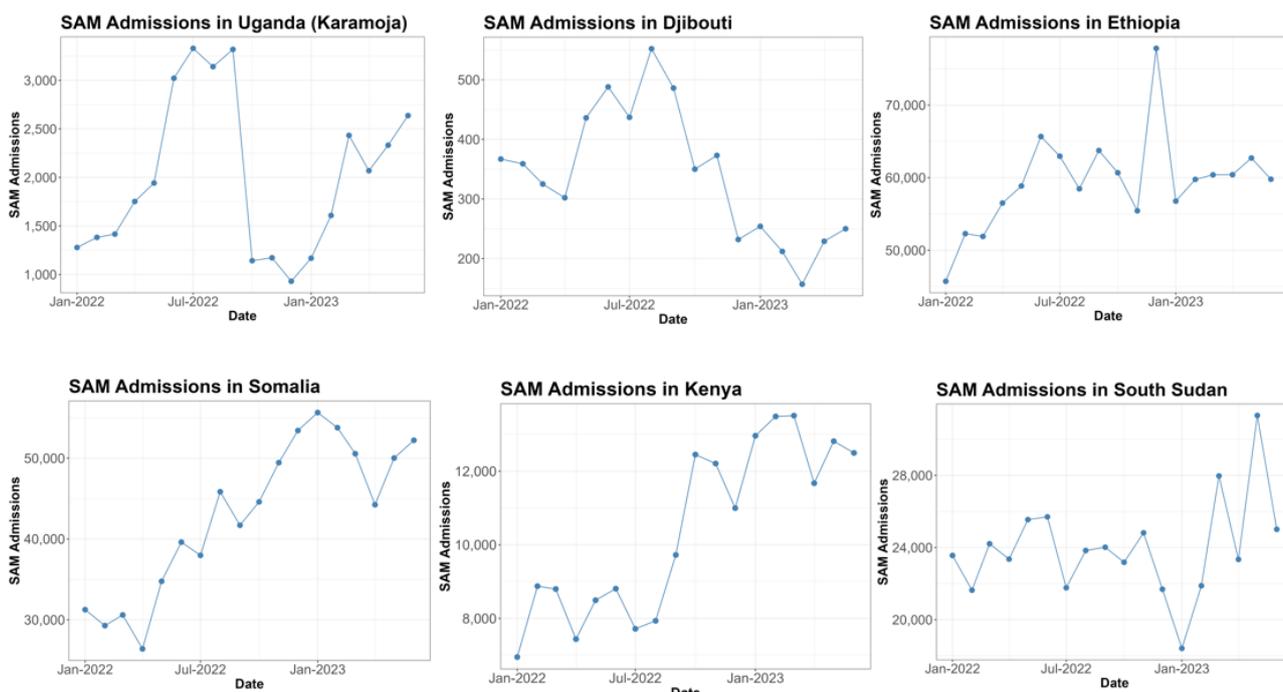


Figure 12: Trend of SAM admission in GHOA countries, January 2022- June 2023. (UNICEF, WHO)

SAM admission treatment outcomes

There have been variations in treatment success rates between countries for children admitted into the therapeutic feeding programme from January to June 2023. Therapeutic feeding programs for the management of SAM include out-patient therapeutic feeding program (OTP) and Stabilization Centre (SC) programs. Figure 5a below shows treatment outcome indicators for OTP and SC programs combined. Somalia, Ethiopia, Kenya, and South Sudan achieved excellent treatment success rates; a cure rate of over 75%, and death rate and defaulter rates below 10% and 15% respectively which are within the acceptable standards. But in Uganda (Karamoja region); the cure rate, defaulter and non-respondent rates were not within the acceptable standards needing to identify the underlying reasons coupled with the requirement to design an effective strategy for better outcomes. A defaulter rate of 12.1% was reported from Kenya which also needs more attention and support.

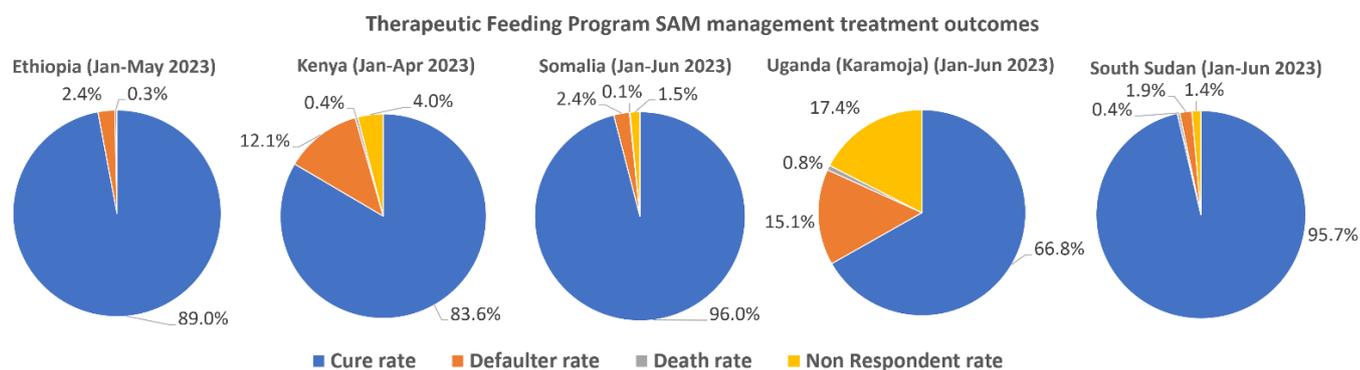


Figure 13 a: Treatment outcome indicators for children admitted to the therapeutic feeding program (OTP and SC), January to June 2023. (Nutrition cluster, UNICEF, WHO)

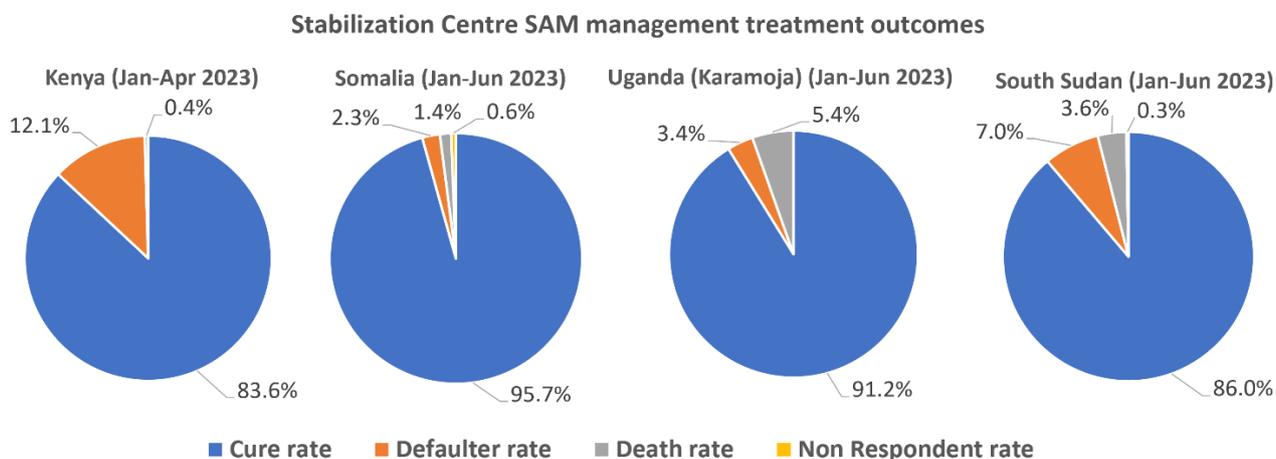


Figure 13 b: Treatment outcome indicators for children admitted to stabilization centres, January to June 2023. (Nutrition cluster, UNICEF, WHO)

Within the SAM children admitted to the stabilization centres between January and June 2023, cure rates of 95.7%, 91.2% and 86.0% were reported from Somalia, Uganda, and South Sudan, respectively, indicating a very good treatment success rate.

Priority health threats and risks

Taking into consideration the ongoing extreme weather events, disease outbreaks, level of malnutrition situation as well as predicted El-Nino's health impacts, a summary of the anticipated public health risks and threats with the level of likelihood, it's public health consequences and risk level are presented below for the affected population in the region over the next six months (July – December 2023).

Table 4: Key health risks in the GHOA region in the context of the drought and food insecurity crisis, July - December 2023.

Public health risk	Likelihood	Public health consequences	Level of risk*	Rationale
Malnutrition	Certain	Severe	Very High Risk	Rising food insecurity and the prevalence of diarrhea and other disease outbreaks can lead to malnutrition, particularly in drought-stricken areas of the region. The onset of El-Nino could potentially aggravate already existing situation and could result in displacement and unnecessary mortality among under-five children.
Cholera and other diarrheal diseases	Almost Certain	Severe	Very High Risk	Ongoing cholera and AWD outbreak affecting 3 countries in the region. Limited WASH services including low access to safe water. Increased risk of flooding and water scarcity due to the start of El-Nino and expected to continue towards the end of the year 2023. High cross border movement and outbreaks are likely to persist and extend to more geographic areas.
Malaria	Almost Certain	Major	Very High Risk	The upsurge in vector breeding, primarily because of El Niño, is anticipated to have its most significant impact on malaria in late 2023 and early 2024. Epidemic prone areas are likely to see a surge in malaria cases.
Rift Valley Fever	Highly Likely	Major	High Risk	In east Africa, areas at high risk for Rift Valley Fever Virus (RVF) are likely to be in areas with vector's suitability, past occurrences of the virus, proximity to known affected regions, and locations encountering elevated rainfall and flooding. Onset of El-Nino could potentially aggravate the situation.
Other vector-borne diseases	Likely	Moderate	Moderate Risk	The rise in vector breeding, increased exposure to vectors, presence of new mosquitos and movement of animals. (E.g., Chikungunya and Dengue)
Measles	Highly Likely	Major	High Risk	Ongoing measles outbreaks in the region, displacement, crowding and disruption in vaccination services
Other vaccine-preventable diseases	Likely	Moderate	Moderate Risk	Increased movement/displacement particularly in pastoral communities leading to reduction in service utilization including immunization. Increased risk for meningitis, polio, and pertussis.
Effects of heat stress and air pollution	Almost certain	Moderate	Moderate Risk	Heat stress is the leading cause of weather-related deaths and can exacerbate underlying non-communicable diseases (NCDs). Drier areas of Sudan, Northern Ethiopia and Djibouti likely to be affected.
Maternal and child health	Likely	Moderate	High Risk	Decreased access to health services, displacement, others due to drought, conflict and extreme weather events
Direct injuries	Likely	Minimal	Low Risk	Flooding, storms, wildfires may lead to direct trauma and deaths.
Gender-based violence	Highly Likely	Moderate	High Risk	Reduced livelihoods, food insecurity, displacement, conflict, others
Mental health and psychosocial support	Highly Likely	Moderate	High Risk	Reduced livelihoods, food insecurity, displacement, conflict, others

*Level of risk:

Red: Very high risk. Could result in high levels of excess mortality/morbidity.

Orange: High risk. Could result in considerable levels of excess mortality/morbidity.

Yellow: Moderate risk. Could make a moderate contribution to excess mortality/morbidity.

Green: Low Risk. Minimal contribution to excess mortality/morbidity

Vaccination coverage

Routine Immunization

Immunization is one of the key components of the primary health program saving millions of lives. The COVID-19 pandemic associated disruptions and COVID-19 vaccination efforts resulted in a dramatic setback on the gradual improvement made before globally including the GHOA countries. The extreme weather events in the region in the context of already weakened health systems are likely to impact the vaccination activities. According to the WHO UNICEF immunization coverage estimates for 2022, countries like Kenya, Uganda and Sudan were estimated to have more than 80% coverage for most of the routine antigens including the first and third dose of pentavalent vaccines and first dose of measles containing vaccines. The other GHOA countries including Djibouti, Ethiopia, and South Sudan were estimated to have below 80% immunization coverage in the same reporting period. In South Sudan, major improvements have been observed in 2022 with an estimated first and third dose of pentavalent vaccine coverage had reached to 76% and 73% in comparison to 51% and 49% in 2021 respectively [51].

In Somalia, MOH reported immunization coverages for first and third dose of pentavalent as well as the first dose of measles vaccines above 90% at national level in 2022. Several and continuous efforts have been made to improve the coverage through the integration of immunization services in outreach, in vaccination campaigns and through improving the referral system between the community and health facility level.

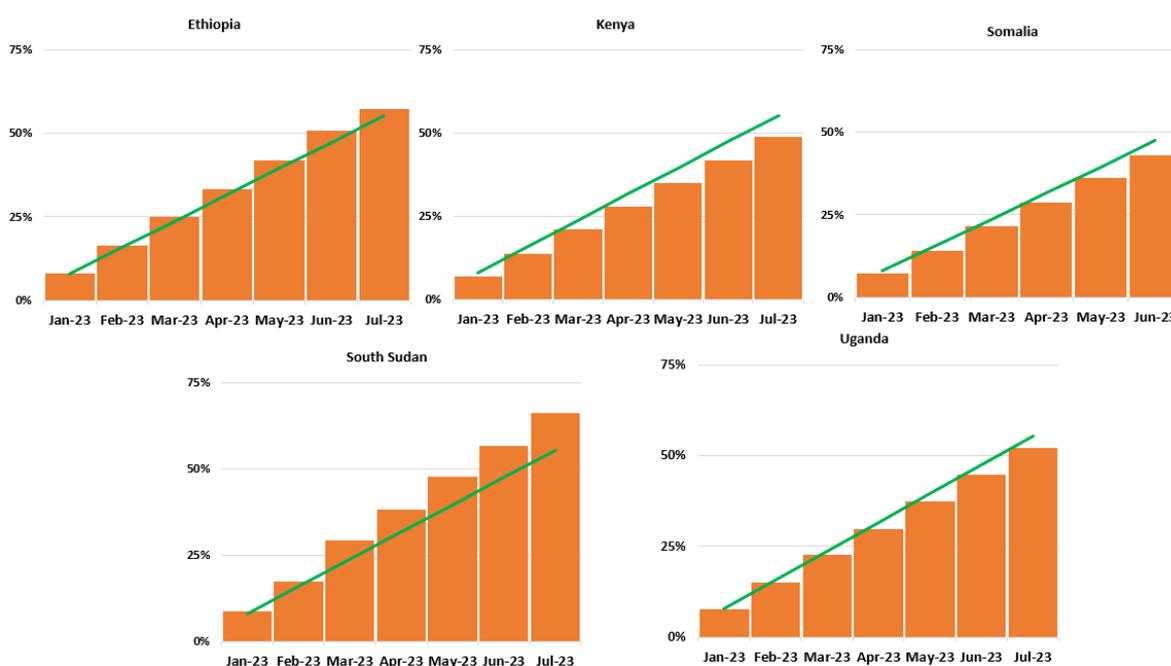


Figure 14: Cumulative Immunization Coverage for Penta 3 among GHOA countries from January-July 2023. Green line indicates the cumulative target and orange bars indicate the cumulative performance for each country. MOH, WHO country offices

At the national level, countries are targeting 95% of children under the age of one year during their planning process to be able to achieve the highest target and reduce the risk of vaccine preventable disease. In the first half of the year 2023, countries like Ethiopia, Kenya, Somalia, South Sudan, and Uganda are making a very good progress on routine immunization performance and all are in line with the targets set at the beginning of the year.

The dropout rate (DOR) between first dose and third dose of pentavalent vaccine were within the acceptable standard of below 10% for Ethiopia, Kenya, Somalia, and Uganda. South Sudan had a 10% drop out rate and needs more attention in reaching out those children who had missed their third dose of pentavalent vaccine. Several strategies including the expansion of the outreach programs, periodic intensification of routine immunization programs (PIRI) and other reactive vaccination activities have helped in improving the coverage.

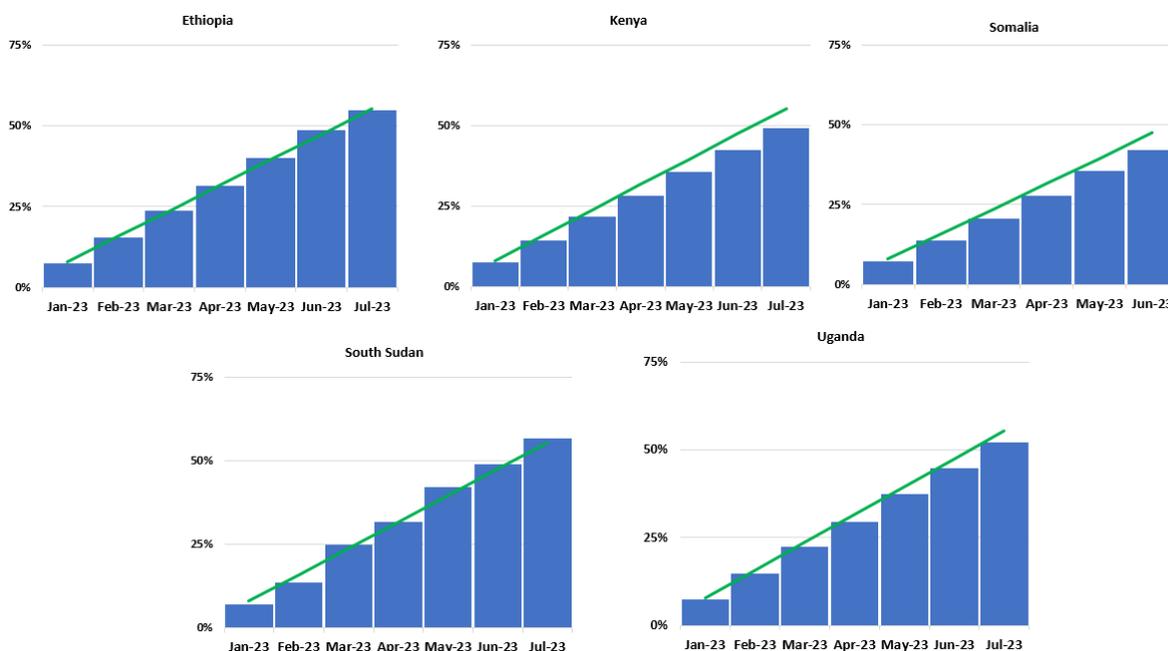


Figure 15: Cumulative Immunization Coverage for Measles 1/Measles Rubella 1 among GHOA countries from January-July 2023. Green line indicates the cumulative target and blue bars indicate the cumulative performance for each country. MOH, WHO country offices

In Sudan, before the start of the crisis, a drop in the implementation of planned immunization sessions led to a decline in the coverage of 3rd dose of Diphtheria- Pertussis-Tetanus (DTP3) from 93% in 2019 before the pandemic to 84% in 2021 and 2022, a drop in the coverage of MCV1 from 90% in 2019 to 81% in 2022. The highest number in zero doses has been reported in 2022 fueled by the pandemic but also due to the ongoing political and economic situation of the country. The current crisis has affected 10 states with seven of them affected totally and 3 partially, which has negatively impacted the already existing system for providing fixed and outreach vaccination sessions. The monthly performance of the 7 totally affected states showed a significant drop on third dose of pentavalent vaccine from 71% in January 2023 to 24% in June 2023 and the same performance was observed for the rest of the antigens which indicates how the crisis continued to impact the routine immunization services in the country. Based on the data available from 11 states which are not affected, the trend of coverage has shown a continuous reduction due to issues related to operational cost, delay in vaccinators payment, and frequent stockout of vaccines.

Vaccination Campaigns

During the reporting period, **reactive measles campaigns** have been conducted in all GHoA countries and **Oral Cholera Vaccination (OCV) campaigns** conducted in four of the GHoA countries (South Sudan, Somalia, Kenya, Ethiopia). In South Sudan, WHO supported the Ministry of Health (MOH) in conducting an integrated nationwide measles vaccination campaign reaching 2.4 million children (92% coverage), in addition to delivering vitamin A supplementation for 1.5 million, providing deworming tablets for 58,274 children, and mid upper arm circumference (MUAC) screening for 1.1 million children. In response to the cholera outbreak, an OCV campaign was conducted reaching 54,538 people (82% coverage) in affected areas (Malakal and protection of civilian (POC) sites). In **Somalia**, an integrated measles and polio campaign was conducted vaccinating >2.3 million people for measles (90% coverage) & >2.6 million people for polio (91% coverage). An OCV campaign was conducted reaching nearly one million people in 10 cholera affected districts; the first round achieved 96% coverage and second round 99% coverage. Additionally, during the reporting period planning was underway for an OCV campaign targeting 590,000 people in five districts around Mandera triangle for August 2023.

In **Kenya**, an integrated measles campaign was conducted in December 2022 reaching > 1.2M (9-59 months) children. An OCV campaign was conducted reaching more than 2 million (98%) people (in 4 affected counties) in Feb 2023. A new OCV campaign was planned for affected counties including the areas bordering Kenya and Ethiopia (The Mandera triangle). In **Ethiopia**, a nationwide integrated preventive measles campaign was conducted targeting 14.5 million children aged 9-59 months. An additional targeted campaign to be able to reach 916,993 children 6 months to 10 years, was completed in Amhara (100% administrative coverage), Somali (100% administrative coverage) and Oromia (108% coverage) in July 2023. OCV campaigns were conducted in cholera affected regions (Somali and Oromia), vaccinating a total of 1,997,328 people (99% coverage) in 21 severely cholera affected woredas in January (86,910 persons in four woredas) and May 2023.

In **Sudan**, WHO provided technical and logistical support to a reactive measles vaccination campaign in Blue Nile State that was conducted on 31 May to 2 June 2023 targeting more than 3,000 under-five children, and 35,178 people aged 5-15 years. Additionally, a three-day measles reactive vaccination campaign was conducted between 12-14 June 2023 in White Nile Refugee Camps in which operational costs were covered by partners on the ground (MSF Spain and Plan International). In **Uganda**, a reactive measles vaccination campaign was conducted in the districts of Lamwo and Kiryandongo following the outbreak of measles. In response to the recent malaria epidemic, WHO reviewed malaria control activities in four districts (Serere, Karenga, Kotido and Moroto) and supported the installation of malaria toolkit applications and the activation of district task forces for malaria outbreak response.

Epidemic-prone diseases

Multiple outbreaks of epidemic-prone diseases such as cholera, measles, malaria, meningitis, anthrax, dengue fever, and hepatitis E have affected the countries in the GHOA region. Almost all the drought-affected districts in these countries have reported disease outbreaks due to very low vaccination coverage and poor water, hygiene, and sanitation conditions.

Disease outbreaks

As of 30 June 2023

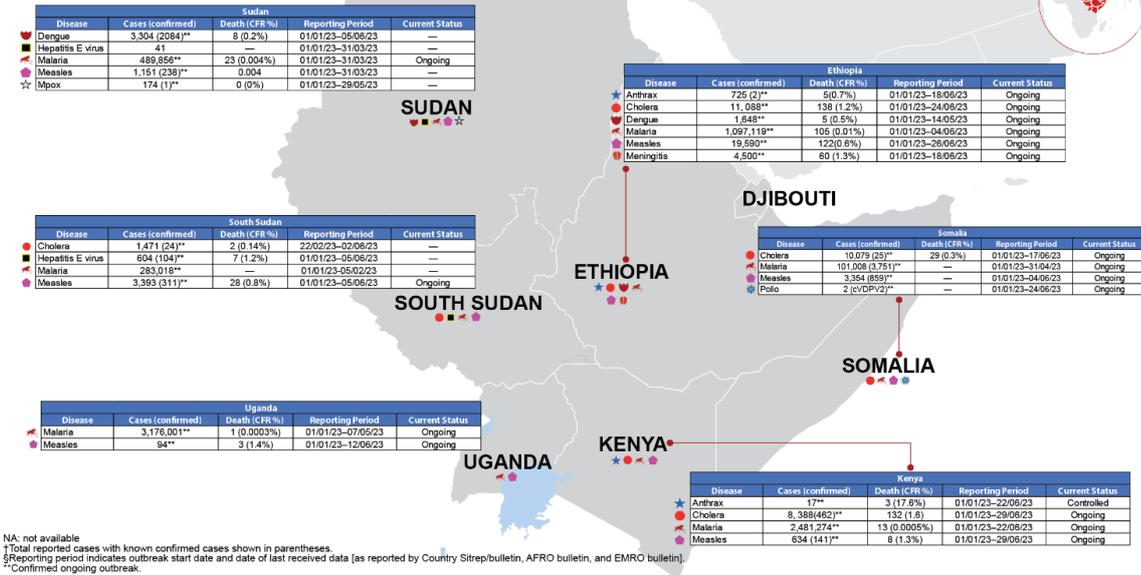


Figure 16: Selected epidemic-prone disease outbreaks in the GHOA region from 1 January to 30 June 2023.

Measles

Measles continues to be one of the top causes of deaths among children under five globally, and when combined with high levels of malnutrition and a lack of sufficient health care, up to 10% of measles cases can result in death. To contain the measles outbreak affected the region, countries are implementing reactive and targeted vaccination campaigns [23]. In **Ethiopia**, the ongoing measles outbreak was declared in August 2021; currently active outbreaks are ongoing in eight regions with 27 zones and 58 woredas reporting cases. As of 29th June 2023, a total of 21,936 cases and 220 deaths (CFR: 1.0%) have been reported, of which 10,614 cases and 100 deaths are reported this year, between Jan and Jun 2023.

In **South Sudan**, a measles outbreak was declared on 10th December 2022 at the national level. As of 05 June 2023, a total of 6,138 measles cases and 59 deaths (CFR: 1.0%) have been reported in 65 counties and the outbreak is still active in all the ten states. The majority (72, 1%) of all the measles cases reported are children under 5 years of age and the highest case fatality rate (1.4%) was reported among children aged 1-4 years. In **Somalia**, the measles outbreak has been reported in the country for over three years. As of 4th June 2023, a total of 20,447 measles cases have been reported overall of which 3,354 are new cases in 2023. Out of the new cases reported in 2023, 69% were children under 5 years old. The regions reporting most of the cases are currently Bay, Banadir and Lower Shabelle and Lower Juba.

In **Sudan**, as of 31st of March 2023, a total of 4,354 measles cases have been reported of which 1,550 are lab-confirmed, with CFR of 0.4%. From 15 April (post crisis) to 06 July 2023, a total of 918 suspected measles cases and 22 deaths (CFR 2.4%) had been reported and majority of the cases were from White Nile and Blue Nile states. Between 21 May through end of June 2023, a total of 957 fever and rash cases with 22 deaths were captured through the surveillance system. None of cases were tested in laboratory for confirmation as of end of June 2023.

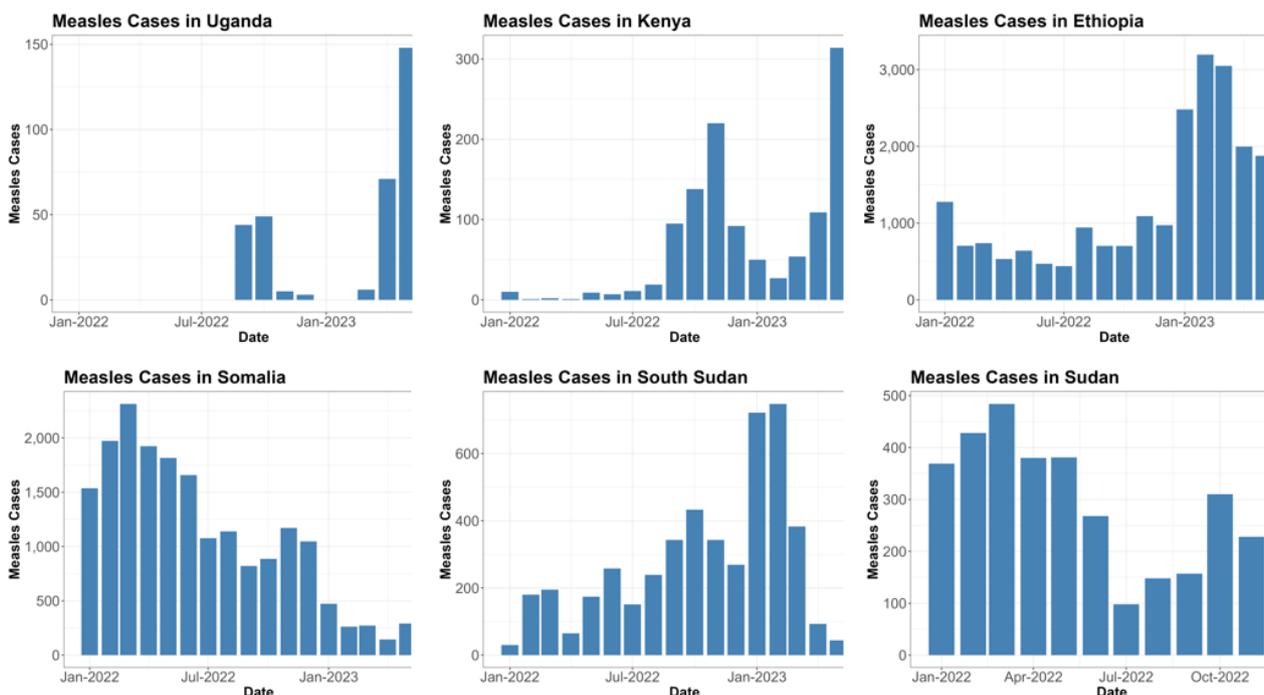


Figure 17: Epi curve for the measles outbreak situation in GHOA countries, as of June 2023. Ministries of health, WHO country offices

Cholera

Three of the region's seven countries (Ethiopia, Kenya, and Somalia) are currently experiencing a widespread cholera outbreak, with over ten thousand cases in each country, including the border areas of the three countries (Mandera triangle), which is now becoming the epicentre of the outbreak, with the Somalia side reporting a significantly high number of cases). As of June 2023, the number of cases started to decline especially on the Somalia side [3].

El Niño conditions are expected to bring increased rainfall and flood risks to parts of the region (southeast Ethiopia, much of Kenya, Uganda, and Somalia) in the third and fourth quarters of 2023,

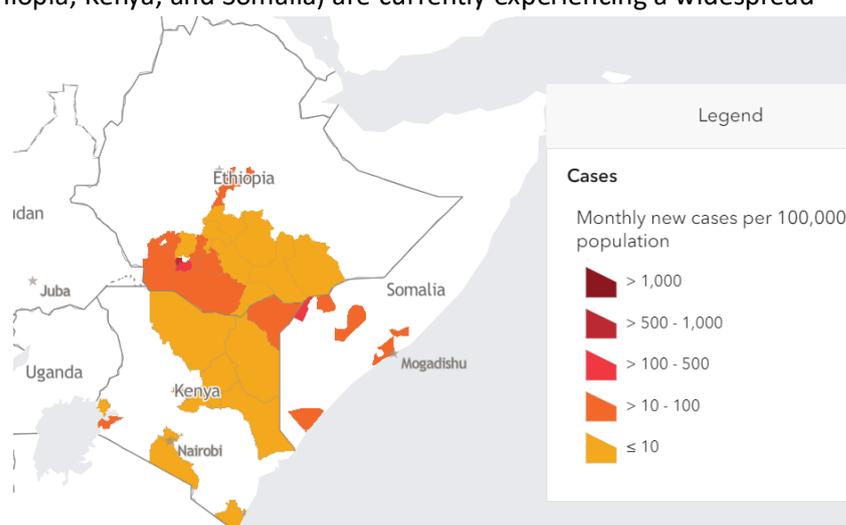


Figure 18: Cholera outbreak situation in the horn of Africa as of June 2023 [3]. Outbreak time periods: Ethiopia, August 2022 – present (ongoing); Somalia, January 2022 – present (ongoing) (Banadir region: October 2017-present); Kenya, October 2022 – present (ongoing).

presenting an elevated risk of surges in cholera cases, worsening pre-existing outbreaks, including in the Mandera triangle area [6]. The projected rainfall for the Mandera triangle area is roughly 80-90% above normal for the October to December season. This will present an increased risk for cholera outbreaks [35].

Drier than usual conditions resulting from El Niño in other parts of the region (northern Ethiopia, Djibouti, South Sudan, Sudan) may further hamper access to safe water sources, also contributing to risk of cholera and other diarrheal diseases [6].

In **Ethiopia**, the cholera outbreak started in August 2022, affecting over 86 woredas in Oromia, Somali, SNNP and Sidama regions. A total of 11,960 cholera cases and 165 deaths (CFR: 1.38%) were reported in 2023 (as of 24 June), with over 96% of reported cases from drought affected regions of Oromia, Somali and SNNP. With wetter than usual conditions anticipated Oct 2023 – Jan 2024 for southeast Ethiopia, there is increased risk of flooding and cholera in late 2023 [6]. In **Somalia**, the cholera outbreak continued to affect more geographic areas in the country with over 27,685 cases reported since January 2022. This year (as of Jun 30), a total of 10,446 cases and 29 deaths (CFR: 0.3%) have been reported with over 54% of the cases being children under five years. An elevated cholera risk anticipated in the first semester of 2024 due to forecasted El Niño wetter than usual conditions from October 2023 – January 2024 [6].

The cholera outbreak in **Kenya** started in 2022 and affected more than 25 counties with a total of 11,694 cases with 194 associated deaths (CFR:1.6%), as of 29 June 2023. Three counties, Garissa, Mandera and Nairobi, contributed for 64% of the total reported cases nationally, and more than 50% of the reported cases were from three counties in Northeastern Kenya (Garissa, Mandera and Wajir). Elevated cholera risk is anticipated in the first semester of 2024 due to forecasted El Niño wetter than usual conditions in much of Kenya from October 2023 – January 2024 [6].

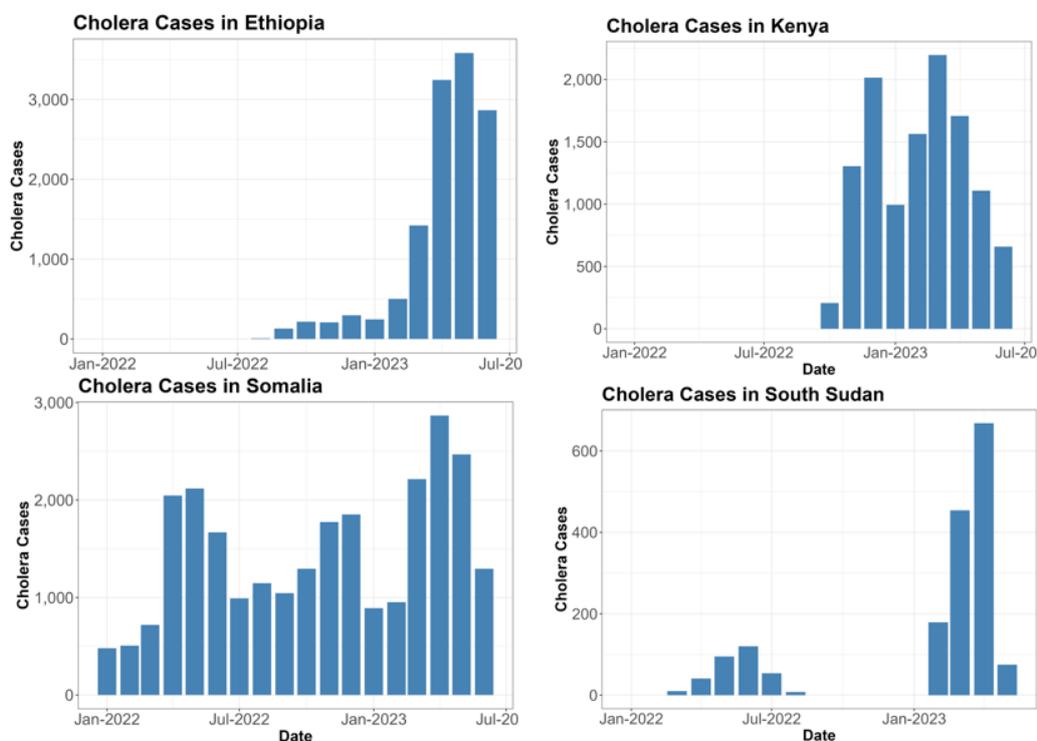


Figure 19: Epi curve for the Cholera outbreak situation in GHOA countries, as of June 2023. (Ministries of health, WHO country offices)

Mpox

In the GHOA region, Sudan remains the only country with a reported outbreak of Mpox. As of May 29, 2023, 171 cases with 1 confirmed case and no deaths have been reported in 2023. Since May 2022, a total of 378 suspected cases were reported (19 cases confirmed) from 6 states and 11 localities, 1 death reported from west Darfur state with CFR 0.26%. Due to the ongoing conflict, reliable Mpox reporting has not been available in recent months.

Polio

During the reporting period, two confirmed cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported from Bay and Lower Shabelle provinces of south-eastern **Somalia** [52]. Additionally, three cases of cVDPV2 were confirmed on 28 June 2023 in **Kenya**, all from Dadaab refugee camp, bordering Somalia [53].

Vector-borne diseases

The GHOA region continued to experience elevated vector-borne diseases. El Niño conditions shift the dynamics of several vector-borne diseases, including dengue, chikungunya, and RVF, and is expected to contribute to an upsurge in vector breeding due to unusual increases in temperature and rainfall patterns [6]. As a result of anticipated wetter than usual conditions (due to El Niño) in parts of the eastern GHOA region, elevated risks of some vector borne diseases, including malaria and RVF, are anticipated in the second half of 2023 for Uganda and Somalia, and the last quarter of 2023 for Northern Ethiopia and Kenya [6].

MALARIA

Six out of seven countries in the region are dealing with an increased number of malaria cases. While malaria is considered endemic in much of the region, high caseloads have been reported from countries, well above historical averages, and some countries (e.g., Sudan, Ethiopia), crossed the epidemic threshold.

Malaria is the leading cause of outpatient consultations in most of the countries in the region. Highest numbers have been reported from Kenya, Ethiopia, Sudan, South Sudan, and Uganda in 2023.

A surge in malaria cases, particularly in epidemic prone areas, resulting primarily from El Niño-induced increased vector breeding, is projected for late 2023 and early 2024 in the region [6, 12]. As a result of anticipated wetter than usual conditions (due to El Niño), elevated malaria risk is anticipated in the second half of 2023 for Uganda and Somalia, and the last quarter of 2023 for southeast Ethiopia and Kenya [6].

In **Ethiopia**, nearly 1.1 million malaria cases were reported as of 4th June 2023. Amhara, Oromia, Southwest Ethiopia People Region (SWEPR), SNNP, and Tigray regions account for the highest contributions to the case load respectively [3]. In late May 2023 (epi week 21), 57% of the national malaria cases were reported from the drought affected regions. With wetter than usual conditions projected for Oct 2023 – Jan 2024 in southeast Ethiopia, there is increased risk of malaria transmission starting in late 2023 [6].

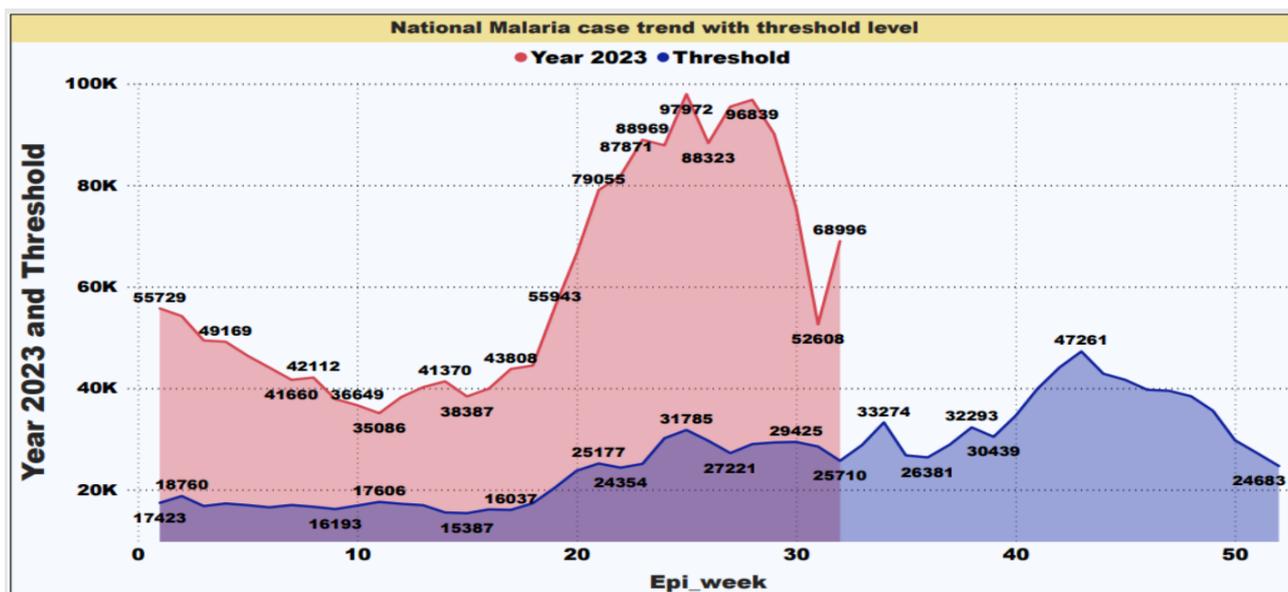


Figure 20: Malaria case situation versus the threshold in the high reporting regions in Ethiopia, 2023. Ethiopian Public health Institute (EPHI) weekly bulletin [25].

In **Sudan**, before the start of the crisis, 489,856 malaria cases including 23 deaths (CFR: 0.004%) have been reported and the epidemic threshold was crossed in four states (East Darfur, Kassala, Gezira and South Darfur) in early March (epi week 9), 2023. Malaria is one of the leading causes of outpatient consultations in the country and shared 11% of the proportional morbidity from the total consultations. After the crisis, between 21 May through end of June 2023, a total of 323 malaria cases were recorded by surveillance system from South Darfur State despite the challenges in getting report from affected areas due to the ongoing conflict.

In **Uganda**, a fourfold increase in malaria out-patient department attendance from 20% to 80% and test positivity rates (20% to 70%) reported. Approximately, 50% of the severe malaria cases had severe anaemia requiring blood transfusion, and there was a three-fold increase in malaria deaths. The Ministry of Health activated District Task Forces to coordinate response to malaria epidemic in highly affected districts. A total of 12 districts were categorised as districts in IMS response mode, 3 in response, 10 in alert mode and 121 were on watch districts [3]. Approximately, 50% of the severe malaria cases had severe anaemia requiring blood transfusion, and there was a three-fold increase in malaria deaths. In **Kenya**, malaria is among the leading causes of morbidity and mortality with approximately 30% of the population at risk of infection [18]. As of 22 June 2023, nearly 2.5 million cases have been reported and it's responsible for an estimated 13-15% of outpatient consultations [54, 55].

Changes in temperature and hydrological patterns due to El Niño conditions and climate change will likely increase suitability for malaria vector breeding and change malaria dynamics in areas which have been previously low risk and, those with typically seasonal transmission and contribute to surges in epidemic prone areas [18].

In **South Sudan**, malaria is one of the main causes of child morbidity in the country [56]. Floods and stagnant water resulting from climactic shocks have increased the number of malaria cases, particularly in Upper Nile, Unity, and Jonglei areas. In **Somalia**, reported laboratory-confirmed cases of malaria have decreased in 2023 compared to the previous period in 2022, due to scaling up of malaria control interventions in drought affected districts.

However, there has been a 25% increase in confirmed malaria cases from January to June of this year. A total of 101,008 cases (3,751 confirmed) have been reported in 2023 as of June. Gedo, Bay, and Banadir are the regions reporting the most suspected malaria cases this year [57].

DENGUE

There has been a global resurgence of dengue in recent decades [58]. Dengue is highly transmissible in tropical and sub-tropical climate areas in mostly urban and peri-urban areas [12]. Warmer temperatures caused by El Niño can impact the way people use water, leading to practices that promote the breeding of mosquitoes, which could facilitate the spread of the dengue virus [12]. With GHoA countries including Sudan, Ethiopia, Somalia, and Djibouti having reported dengue cases before, the risk of outbreaks mediated by El Niño conditions is high particularly in urban areas and refugee/IDP camps [12]. During the reporting period, a dengue outbreak was reported from six woredas of Afar region of **Ethiopia** in April 2023, with a total of 6,178 cases reported between April and June 2023 [3]. Other regions in Ethiopia such as Somali and Dire Dawa had also reported dengue cases. In Sudan, before the start of the crisis 84 localities across 12 states reported dengue fever cases as of third of April 2023 with Khartoum state being affected for the first time. A total of 8,530 suspected cases (2,730 confirmed) with attack rate of 4.1/10,000 population and 45 deaths (CFR: 0.5%) were reported. Most of the cases were reported from Khartoum state (28%), followed by North Kordofan State (18%) and North Darfur (17%) states [41].

RIFT VALLEY FEVER

Rift Valley Fever (RVF) is a vector-borne viral zoonotic disease, spread primarily through movement of animals and mosquitos, presenting threats to human and animal health and the livestock sector. Heavy rains and prolonged floods create an environment suitable for breeding RVF-competent mosquitos.

The last outbreak of RVF in the GHoA region was in December 2007 in north-eastern Kenya and southern Somalia, following heavy rainfall during the 1997/1998 El Niño [6]. All seven documented moderate-large RVF outbreaks in the Horn of Africa since 1950 have been associated with El Niño-mediated above average rainfall patterns [6]. On 15 June 2023, FAO and IGAD issued an alert for Eastern Africa warning of a high risk of RVF occurrence in Eastern Africa, due to increased vector amplification, abundance, and distribution following heavy rains March to May 2023. Favorable conditions are expected to be sustained due to increased rainfall predicted for much of Eastern Africa in the second half of 2023 [59, 6].

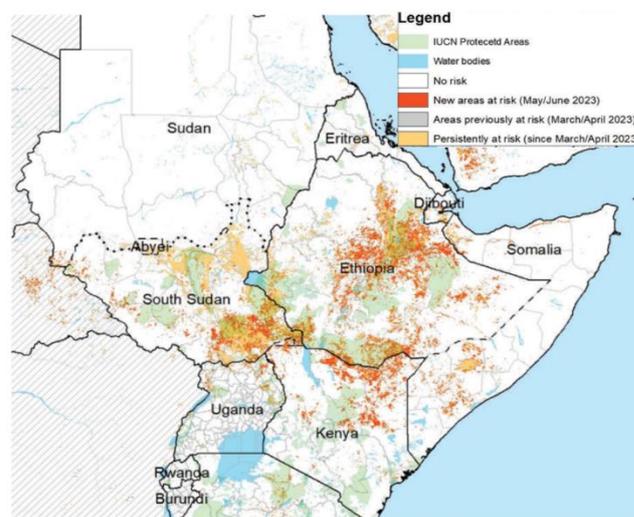


Figure 21: Forecasted risk of RVF vector amplification May-June 2023. FAO, IGAD

All countries in GHoA were predicted to have an increased risk of RVF vector amplification, with Kenya, Ethiopia, Somalia, South Sudan, and Djibouti identified as extensive hotspots and Uganda and Sudan as localized hotspots [59]. In particular, as a result of anticipated wetter than usual conditions (due to El Niño), elevated RVF risk is anticipated in the second half of 2023 for Uganda and Somalia, and the last quarter of 2023 for southeast Ethiopia and Kenya [6].

Meningitis

A total of 4,140 suspected cases and 51 deaths (CFR: 1.2%) were reported in Ethiopia from January to June 2023 [3]. Six regions (Oromia, Amhara, SNNP, Somali, Sidama and SWEPR) contributed 80% of the reported cases [3]. There have been suspected cases of meningitis in other countries including Sudan, Kenya, Uganda, and South Sudan.

Drier than usual conditions and stronger Harmattan winds (dry dusty Saharan continental winds) increase the risk of transmission of meningococcal meningitis [6]. Consequently, rates of meningitis have historically increased in Sahel countries in the year after the onset of an El Niño event that results in reduced precipitation [6]. Therefore, there is an elevated risk of meningitis anticipated starting in early 2024 for Northern Ethiopia and Sudan in particular [6].

Maternal, newborn and child health

Food insecurity and malnutrition are directly linked to poorer health outcomes and increased mortality in women and children, including anaemia in pregnant and breastfeeding women and increased prevalence of malaria, diarrhoea, cholera, and overall poor health in children under five [60]. Maternal and child health are expected to be negatively impacted by the coming El Niño phenomenon, which will have a disproportionate impact on women and children. Increased rainfall, flooding, and drought resulting from El Niño are expected to further decrease access to WASH and health services, increase the incidence of malaria and diarrheal diseases, and limit food access contributing to suboptimal complementary feeding practices [12].

Additionally, high heat can adversely impact pregnancy and prenatal outcomes including increasing rates of preterm birth, stillbirths, and low birth weight [12].

Table 5: Key perinatal care indicators in the GHOA countries; country newborn care data 2022 [61, 18].

Country	Postnatal care for mothers (%)	Antenatal care 4+ visits (%)	Maternal mortality ratio (Per 100,000 live births)	Skilled birth attendant (%)
Djibouti	NA	23%	248	87%
Ethiopia	34%	43%	401	50%
Kenya	78% ↑	66% ↑	342	89%
Somalia	11%	24%	829	32%
South Sudan	NA	17%	1,150	19%
Sudan	27%	51%	295	78%
Uganda	54%	57%	375	74%

Kenya and Uganda reportedly have the highest antenatal and postnatal care coverage in the GHOA region (table 5). Djibouti, and Kenya have the highest proportion of births attended by a skilled birth attendant, at 87% and 89%, respectively. The proportion of women aged 15 to 49 with a live birth that received antenatal care the recommended four or more times is near or below 50% for all countries in the GHOA region, except for Kenya, Sudan and Uganda. There are immense gaps in perinatal care coverage in Somalia and South Sudan, which contributes to the highest maternal mortality ratios in the GHOA region.

In **Kenya**, key perinatal care indicators (the percentage of women who have had four or more ANC visits, percentage of live births assisted by a skilled provider and percentage of women with a live birth who had a postnatal check during the first two days after birth) have all shown an increasing trend over the past five years [18].

Over half (52%) of women aged 15-49 reported at least one serious problem accessing health care for themselves when they are sick. The most common of these barriers reported were obtaining money for treatment (46%) and distance to a health facility (24%) [18].

Table 6: Key child mortality indicators in the GHOA countries. (UN Inter-Agency Group for Child Mortality Estimation 2021 data and Kenya 2022 DHS [62, 18].)

Country	Under-five mortality rate (per 1,000 live births)	Infant mortality rate (per 1,000 live births)	Neonatal mortality rate (per 1,000 live births)
Djibouti	54.1	45.9	29.6
Ethiopia	46.8	34.3	26.2
Kenya (2022)	41	32	21
Somalia	111.8	71.1	36
South Sudan	98.7	63.8	39.6
Sudan	54.9	38.9	26.7
Uganda	42.1	31.2	19

Somalia and South Sudan had the highest child mortality rates in the GHOA region, followed by Sudan and Djibouti. Kenya and Uganda had the lowest child mortality rates in the GHOA region. In **Kenya**, childhood mortality rates have been steadily decreasing since 2003 [18].

HIV

HIV transmission and increased disease progression have also been associated with food insecurity [60]. Competing household resources and lack of food to take medicines which contributed to poorer anti-retroviral therapy uptake and adherence among people living with HIV [60]. In the GHOA region, Kenya and Uganda have the highest HIV prevalence (among people 15 to 49 years) and have achieved the highest ART coverage, at 94% and 84%, respectively [18] [63]. South Sudan and Sudan reportedly have the lowest ART coverage in the GHOA region, at 32% and 28%, respectively [63].

Table 7: Key HIV indicators in the GHOA countries 2022 [63]. Trend compared to previous reporting period indicated:

→ = no change, ↓ = decrease, ↑ = increase.

Country	Persons living with HIV	HIV prevalence 15 to 49 years (%)	ART coverage (%) (adults and children)
Djibouti	6,000 [4,300 – 8,200]	0.7 [0.5 - 1.1]	31 [22 - 42]
Ethiopia	610,000 [510,000 - 750,000]	0.8 [0.6 - 1.0] →	83 [69 - >98] ↑
Kenya	1,400,000 [1,300,000 - 1,600,000]	3.7 [3.3 - 4.1] ↓	94 [84 - >98] ↑
Somalia	7,700 [6,900 – 8,800]	<0.1 [<0.1 - <0.1]	50 [44 - 57]
South Sudan	160,000 [130,000 - 210,000]	1.9 [1.6 - 2.5] ↓	32 [26 - 41] ↑
Sudan	41,000 [34,000 - 50,000]	0.1 [0.1 - 0.2]	28 [23 - 33]
Uganda	1,400,000 [1,300,000 - 1,600,000]	5.1 [2.9 - 5.3] ↓	84 [79 - 93] ↑

For detailed information, please visit [Public Health Situation Analysis: Greater Horn of Africa - January 2023 \(who.int\)](https://www.who.int/publications/m/item/public-health-situation-analysis-greater-horn-of-africa-january-2023).

Tuberculosis

People with undernutrition are three times more likely to develop TB, have poorer TB treatment outcomes, and increased mortality risk from TB [60, 64]. Evidence from 2020 indicates that food security was responsible for approximately 20% of new TB cases [60, 64]. Drug-susceptible TB was among the top five causes of death for all GHOA countries, except Sudan and South Sudan, based on 2019 Global Burden of Disease data [14]. According to the WHO Global TB Report for 2022, all GHOA countries, except Somalia, had a more than 30% reduction in the TB death rate compared to 2015 [65]. All countries have reported TB treatment success rates of over 80% [66].

Table 8: Key TB indicators in the GHOA countries 2021 [66].

Country	TB incidence (per 100,000 people)	TB treatment success rate (% of new cases) (2020)
Djibouti	220	85%
Ethiopia	129	86%
Kenya	250	85%
Somalia	254	90%
South Sudan	227	82%
Sudan	62	86%
Uganda	199	85%

Non-communicable diseases

Food insecurity has been associated with increased risk and severity of non-communicable diseases (NCDs) including diabetes, dyslipidaemia, hypertension, and mental health disorders including depression [60]. It's also associated with non-adherence to dietary counselling and regimens among diabetics [60].

NCDs accounted for over half of deaths in Djibouti and Sudan, based on 2019 data [66, 67]. In Djibouti and Sudan, ischaemic heart disease and stroke were among the top three causes of death in 2019 [67]. Diabetes prevalence in Sudan, at 18.9% in 2021 [66], is reportedly well above the regional average. This has implications for the ongoing conflict and disruption to health services and supply chains for essential medicines, as patients are unable to access life-saving insulin treatment and dialysis for those with kidney disease. Diabetes prevalence is reported to be relatively low (below 5%) in Kenya and Uganda [66].

Trauma

Crisis-attributable injuries

Ethiopia, Somalia and Kenya experienced flooding which resulted in tens of thousands of people being displaced, in addition to hundreds of injuries and deaths as well as the disruption of health facility services. In Somalia, Sudan and South Sudan; a total of 55 attacks on health care has been reported resulting in 10 deaths and 29 injuries. Most of the attacks were reported from Sudan especially since the beginning of the conflict in mid-April 2023. In South Sudan, intercommunal conflicts continued to result in an increased number of deaths and injuries in the country. Parts of Sudan and South Sudan had also been experiencing flooding for months. Overall, flooding in Kenya, Ethiopia, Somalia, South Sudan and Uganda has affected an estimated over 2 million people, displaced over 133,650, and resulted in at least 213 deaths between January-June 2023 [68, 69]. The coming El Niño conditions are expected to increase flood risk for Kenya, Somalia, Uganda, and South-Eastern Ethiopia in the coming months [6].

Gender-based violence

Food insecurity and hunger places additional stress on households, which can contribute to negative coping strategies, and reduce likelihood of conception during seasonal periods of hunger [60]. Influenced by these factors, food security has been associated with increased levels of intimate partner violence [60].

Displacement and travelling long distances to access safe waters sources can expose women and girls to increased risks of gender-based violence (GBV) [70, 71]. The drought has exposed women and children to multiple and intersecting vulnerabilities, heightening the risk of gender-based violence and sexual exploitation and abuse, and hampering children's access to education. Risks of gender-based violence including sexual violence, sexual exploitation, intimate partner violence, and female genital mutilation have increased during this crisis, while services to respond remain limited. GBV and child protections concerns have increased as a result of the drought; issues of concern include families resorting to child marriage to replenish livestock through dowry, school drop-outs, teen pregnancies, child migration, family separation, and transactional sex for basic needs [70, 72]. These trends have been reported in some counties in **Kenya** [70, 71, 72].

In **Somalia**, an estimated three million people need a specialized GBV services, including among displaced populations [73]. Moreover, data indicates that 74% of survivors who accessed GBV services and/or Clinical Management of Rape Services between 2019 and 2021 were IDPs; 99% of whom were females. In **Sudan**, more than 3 million women and girls were estimated to be at risk of GBV even prior to the escalation of conflict in April 2023. All forms of GBV have increased since then, and an estimated 4.2 million women and girls are at risk, particularly displaced women, and girls [74].

In Ethiopia, it has been reported that the drought had significantly increased the risk of GBV especially in the drought-affected areas as women and girls were forced to walk long distances to fetch water as well as the need to take care of the family while male family members are away [75].

Mental health and psychosocial support

Food insecurity has long-term social, physical, and economic impacts and exacerbates risks to social and general wellbeing [60]. The impacts of prolonged drought and food insecurity, reduced livelihoods, households resource constraints, destruction of property and loss of income, displacement, and barriers to accessing health care can place immense stressors on individuals, households, and communities and lead to severe psychological consequences [12]. This is further exacerbated by conflict, and insecurity affecting parts of every country in the GHoA region. The uncertainty, fear, and loss experienced during such events can trigger feelings of anxiety, depression, and post-traumatic stress disorder [12].

Displaced populations are especially vulnerable to these mental health challenges [12]. While forced to leave their homes and communities, they often face isolation, a lack of access to basic necessities, and limited social support [12]. A recent study on the mental health of refugee populations hosted in East Africa (Kenya, Uganda, and Ethiopia) found a high prevalence (estimated 31%) of elevated depressive symptoms and functional impairment among refugee populations, which was significantly higher than the host populations [76].

In Kenya, 4% of women and 3% of men aged 15–49 reported having ever been told by a doctor or other healthcare worker that they have depression or anxiety, 27% of these women and 21% of these men are receiving medication [18].

Health determinants

Security/Conflict

The majority of countries in the GHoA region are conflict-affected in at least some areas. Conflict exacerbates food insecurity and malnutrition crises and disease outbreak risks by driving displacement, disrupting health services and WASH infrastructure, causing shortages of food and NFIs, disrupting immunization, surveillance, and vector control efforts, and impeding humanitarian access and delivery of aid.

During the reporting period, the conflict in **Sudan** has had particularly devastating impact on the food insecurity, malnutrition, and health crises in the country and with impacts felt across the region. The conflict between the Sudanese Armed Forces and Rapid Support Forces that escalated on 15 April 2023 has deepened existing humanitarian and food insecurity crises [39]. On 05 June 2023, the WHO graded the escalation of violence as a grade 3 public health emergency [10].

The escalation of violence has resulted in mass displacements; critical damage to infrastructure including health facilities, water sources, power, and telecommunications; and disrupted essential services including health care and medical supply chains [39]. There are widespread acute shortages of food and other essential supplies, national malnutrition treatment stockpiles were destroyed, and the production of staple crops are at risk, causing the deterioration of an already fragile food insecurity and malnutrition situation [39]. The conflict has caused market prices to soar, with impacts felt across the region [39]. There is a direct link with conflict and food insecurity; areas with active conflict (the Darfur States, Khartoum, and South Kordofan) register the highest proportion of food insecure populations [39].

There is an increased risk of morbidities and mortalities related to communicable diseases (measles, cholera), vector borne disease (malaria, dengue fever), malnutrition and maternal and child health related diseases due to disruptions of health services, routine surveillance and laboratory services and the depletion of available resources and commodities. Challenges in waste management and interruption of vector control efforts compound the risk of outbreaks of water-borne and vector-borne diseases [10].

In **Kenya**, during the first half of 2023, an upsurge of inter-communal conflicts and banditry attacks were reported in parts of Baringo, Samburu, Turkana, Elgeyo Marakwet, Laikipia and West Pokot counties. Insecurity in different parts of the country impedes access and response efforts to the ongoing crisis [71].

In **Somalia**, ongoing conflict and insecurity related to al-Shabaab attacks, military operations, and intercommunal violence continue to drive displacement and exacerbate food insecurity [77]. Large parts of Somalia are inaccessible to humanitarian actors due to insecurity, armed conflict, and control of non-state armed groups [78]. Ongoing violence in Las Caanood, Sool region of Somaliland, escalating in February 2023, has triggered mass displacement of civilians, largely into Somali region, Ethiopia [78]. The violence has compounded the humanitarian situation and displacement caused by the drought, and hampered response efforts [79]. Conflict was among the main causes of displacement during the first half of this year [79].

The conflict in northern **Ethiopia** has resulted in trauma and displacement since November 2020. In March 2023, the conflict in Amhara regions started and continued to result in trauma and displacement. Impacts of the conflict have increased food insecurity and worsened infectious disease outbreak risks including for cholera and vaccine preventable diseases [80]. Ethiopia faces significant displacement, which is largely conflict-driven in different parts of the country, related to ethnic and border-based disputes [81].

Following the signing of a Cessation of Hostilities Agreement on 2 November 2022, humanitarian access to the Tigray region has gradually improved [80]; however, food aid has been paused due to great concern on food diversion which acutely impacting IDPs and host communities in the north and other parts of the country [82].

Displacement

The region has witnessed a steady rise in the number of refugees and IDPs over the past three years, primarily due to worsening drought, food insecurity, floods, and ongoing conflict [12]. The region is hosting a total of 12.2 million IDPs and 4.6 million refugees and returnees [4]. Ethiopia and Sudan are among the most affected countries, with the highest number of IDPs, while Uganda and Sudan host the largest population of refugees, totalling over 2.7 million, along with asylum seekers [12]. Overall, flooding in Kenya, Ethiopia, Somalia, South Sudan and Uganda displaced over 133,650 between January-June 2023 [68].

The intense fighting in **Sudan** which erupted on 15 April 2023 resulted in 2.9 million new displacements including more than 2.2 million internally displaced, and nearly 700,000 people who crossed into neighboring countries as of 28 June 2023 [83]. This includes nearly 147,000 people newly fleeing into South Sudan and nearly 59,000 into Ethiopia [83].

Over 2.3 million people have been **displaced** from Somalia, Ethiopia, and Kenya **by the drought** since January 2022 [12]. Additionally, refugee camps have experienced a substantial influx of new refugees seeking safety from neighbouring countries [12].

In **Somalia**, conflict, drought, and flooding displaced 1.35 million people from January to June 2023, including 369,000 people displaced by drought [84]; among the highest rates of displacement in the country on record [85]. In Somalia, out of 57,000 displacements during June 2023, 30% were attributed to drought, 62% to conflict or insecurity, and 3% to floods [86].

In **Ethiopia**, displacement is affecting several regions including Amhara, Afar, Oromia, Somali, SNNP, Tigray, and Benishangul Gumuz [82]. The main causes of displacement are conflict (66%), drought (18%), and social tension (7%) [81]. IDPs in Ethiopia reporting drought as the primary reason for displacement were largely from Oromia, Somali, and Afar regions [81]. Ethiopia was hosting over 926,000 refugees as of 30 June 2023, most of whom are from South Sudan, Somalia and Eritrea, and 81% woman and children [87].

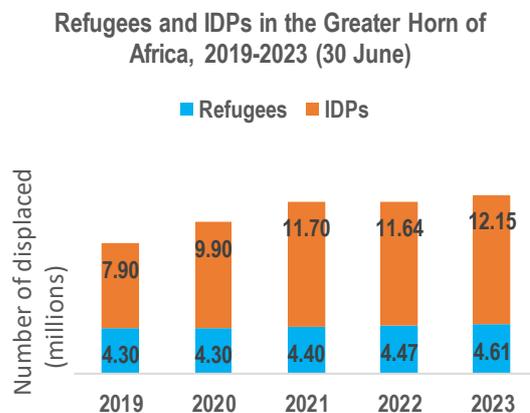


Figure 22: Displaced population (IDP's, Refugees and Asylum seekers) in GHoA region as of June 2023. UNHCR [4].

Refugees, Asylum-Seekers, Returnees and IDPs in GHOA

Data as of 30 June 2023

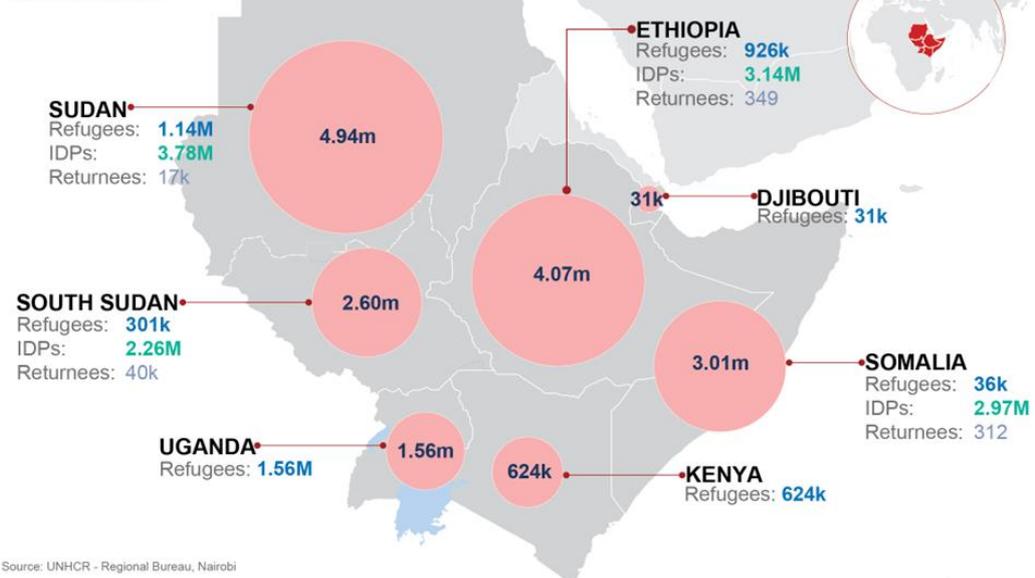


Figure 23: Displaced population (IDP's, Refugees and Asylum seekers) in GHoA region as of June 2023. UNHCR [4].

Water, Sanitation and Hygiene (WASH)

In the GHoA region, the lack of adequate and safe water access, coupled with poor sanitation and hygiene practices, is a significant driver of infectious disease transmission, particularly during prolonged drought periods [12]. During the prolonged drought period in the region, supplying clean and reliable water in drought-prone areas, such as pastoral regions, has been a significant challenge. During the reporting period, cholera outbreaks affected 3 countries (Ethiopia, Kenya, Somalia) and areas affected by the outbreaks had very limited WASH facilities and posed a significant challenge in the outbreak response measures.

In the Horn of Africa (Ethiopia, Somalia, and Kenya) alone, an estimated 25.6 million people, including 14.1 million children, do not have access to safe water [88, 12]. This includes 13.0 million people (over 11% of the population) in Ethiopia, 8.2 million people (nearly half, 48% of the population) in Somalia, and 4.4 million (8% of the population) in Kenya [88]. In Ethiopia, South Sudan, and Uganda, less than 60% of the population have at least basic water source service coverage [89].

According to UNICEF, as of 30 June 2023, 15% of the target population in the Horn of Africa (Ethiopia, Kenya, Somalia) have been reached with access to safe water interventions as part of response efforts [88]. In **Ethiopia**, 2.9 million people in drought affected areas are targeted for WASH services.

Inadequate access to water sources can drive people to travel long distances in search of clean water sources, exacerbating pre-existing risks and vulnerabilities. Population movement in search of water sources, has led to contamination of the fewer water sources further increasing the risk of and waterborne disease outbreak [12].

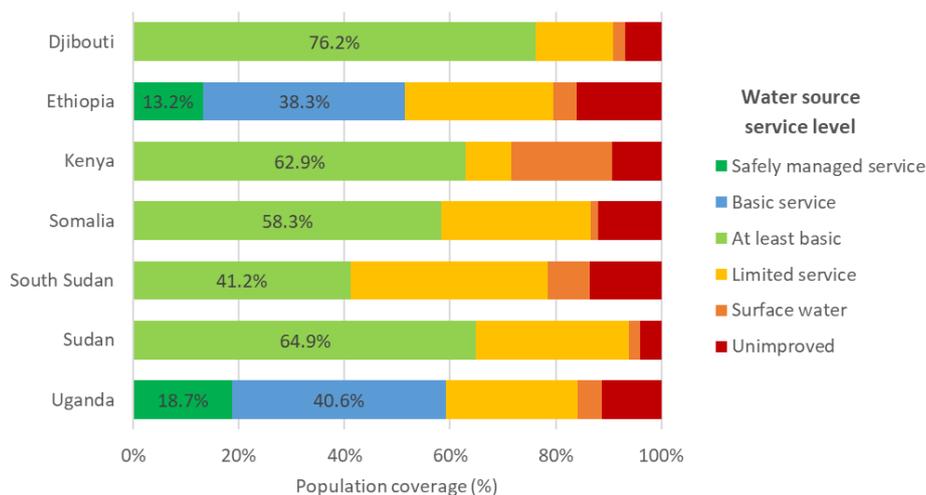


Figure 24: Estimates of water source service level coverage in GHOA countries. Access to drinking water WHO/UNICEF JMP estimates 2022 [89].

In Kenya, during the January – March 2023 dry season, the National Drought Management Authority reported that in ASALs, up to 90% of semi-permanent open water sources had dried up, forcing some to journey up to 30 kilo metres in search of water sources [72]. Critical WASH supplies, including water treatment chemicals, have been prepositioned for drought-cholera-affected communities [90]. Cholera and drought affected counties were supported to develop comprehensive WASH strategies to guide interventions and mitigate the impact of cholera and drought [90].

Women and girls are forced to travel significantly longer distances to reach water sources [12]. This situation, in many cases, results in them walking two to three times the distances they typically cover during a normal dry season [12]. Consequently, their vulnerability to gender-based violence and dehydration is exacerbated [12]. Moreover, the scarcity of water is adversely affecting efforts to prevent and control infections within healthcare facilities and educational institutions [91, 12]. WASH services are also poorer among displaced persons in the region living in camps [12]. Substantial gaps in WASH response are reported for Ethiopia, with challenges including lack of funding, insufficient partners’ presence in many regions, and requirement for long term investments in water systems for water trucking in drought affected areas [92].

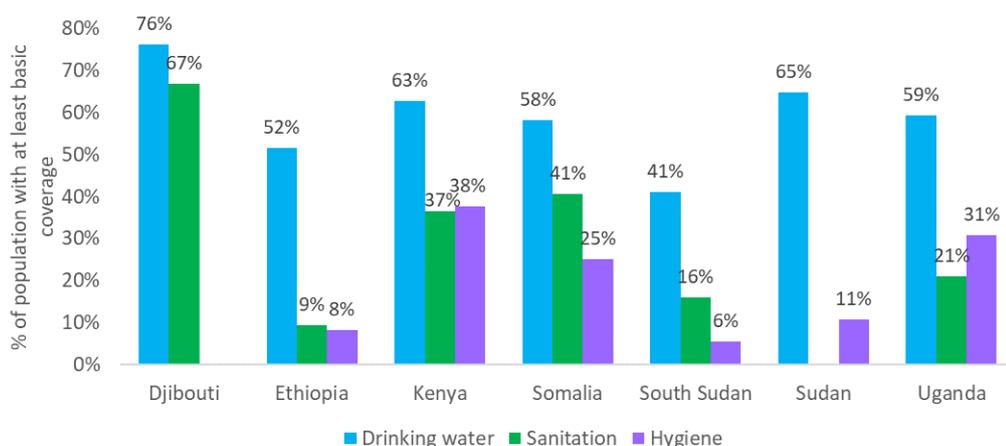


Figure 25: Estimates of WASH service level coverage in GHOA countries, WHO/UNICEF JMP estimates 2022 [89].

3. Health system needs

Access to healthcare

As malnutrition increases, the health needs are mounting, especially among children. The situation is likely to worsen in areas with poor access to health services. Consequently, these underserved areas are becoming increasingly vulnerable to the onset of disease outbreaks. To effectively address this situation, it is imperative to pinpoint the geographical areas where access to healthcare is deficient. This strategic identification will play a crucial role in directing targeted interventions aimed at ameliorating the prevailing health challenges. This involves creating maps that show where health services are, where people live, and other factors that affect how easy it is to get to those services. These factors include road networks, topography, land use, and any barriers like protected areas that might make it harder to reach healthcare. WHO has undertaken a geographic accessibility analysis to understand marginalization to specific health services, including immunization, Comprehensive Emergency Obstetric and Newborn Care (CEMOC) and SAM treatment, using the AccessMod tool in two countries (Somalia and Kenya) and planned to extend to other countries in the GHOA region.

In **Somalia**, 15.3 million in IPC AMN Phase 2+ live more than 2 hours from a SAM stabilization facility. Approximately, 3 in 5 mothers needing caesarean sections in IPC AMN Phase 2+ regions live more than 2 hours from a CEMOC facility. 40% of population face geographic barriers if they need access to SAM facilities. The proportion having poor access to services is poorest in IPC AMN Phase 4 areas of the country as shown in Table 26 below.

Table 9: Geographic accessibility analysis in Somalia, June 2023

IPC Class	CEMOC		Severe Acute malnutrition	
	Population without access	Mean Access outside 2 hours	Population without access	Mean Access outside 2 hours
IPC 2	87,435	32.2%	2,857,010	26.3%
IPC 3	128,970	63.7%	3,961,241	37.0%
IPC 4	192,804	83.4%	7,627,044	49.5%
IPC 5	25,094	42.8%	937,640	0.0%
Total	521,737	59.1%	15,382,935	40.9%

In **Kenya**, 6.1 million in IPC AMN Phase 2+ live more than 2 hours from a SAM stabilization facility, while more than half of mothers needing caesarean sections in IPC AMN Phase 2+ regions live more than 2 hours from a CEMOC facility. Half of infants needing immunization in IPC AMN Phase 2+ regions live more than 1 hour from immunizing facility suggesting there are populations that treatment seeking behaviour would be significantly affected by the food insecurity situation.

Table 10: Geographic accessibility analysis in Kenya, May 2023

IPC Class	Immunization		CEMOC		Severe Acute malnutrition	
	Population without access	Mean Access outside 1 hour	Population without access	Mean Access within 2 hours	Population without access	Mean Access within 2 hours
IPC 2	85,805	32.1%	44,920	42.0%	1,535,051	26.3%
IPC 3	51,957	34.4%	41,007	67.8%	1,366,271	37.0%
IPC 4	147,662	66.1%	58,901	66.1%	3,199,016	49.5%
IPC 5	-	0.0%	-	0.0%	-	0.0%
Total	285,424	50.1%	144,828	59.1%	6,100,338	40.9%

Damage to health facilities

Flooding across the region from March to May 2023, particularly in **Somalia, Ethiopia, and Kenya**, caused disruption of services and widespread damage including to health facilities and WASH infrastructure [3]. Damage to health infrastructure in the region has also occurred as a result of conflict, insecurity, and direct attacks. Ongoing violence in Oromia region, **Ethiopia**, has extensively damaged and destroyed critical health infrastructure and resulted in looting of health facilities and stocks [77]. In **Sudan**, the ongoing conflict has led to widespread damage of health facilities through violence, direct attacks, occupations, and lootings. As of June 22, at least 60% of health facilities across the country were estimated to be non-functional [44]. In **Ethiopia**, the conflict in the northern parts of the country (Tigray, Amhara and Afar) had significantly affected the health care facilities through damage to the infrastructures and looting of the existing drugs, supplies and equipment. This has resulted in millions of people having difficulty in accessing health care services [93]

Attacks on health care

Attacks on health care facilities reduce the effectiveness of response efforts. In Somalia, South Sudan and Sudan 55 verified attacks were registered as of 30 June 2023, resulting in 29 injuries and 10 deaths [94]. Mid-way through 2023, this is already the highest number of verified attacks on health care facilities among these three countries in at least five years (Table 28) [94]. The vast majority of reports are from Sudan with 51 attacks on health care facilities, leading to 21 injuries and 10 deaths [94]. Please note that data are not available for attacks on health in the other GHoA region countries.

Table 11: Registered attacks on health care in Somalia, Sudan, and South Sudan from 01 January 2019 to 30 June 2023. (Based on the WHO Surveillance System for Attacks on Health Care) [94]

Attacks on health care	2018	2019	2020	2021	2022	2023 (Jan-June)
Attacks	5	8	9	43	33	57
Injuries	3	5	8	73	40	29
Deaths	2	0	23	28	66	10

4. Humanitarian Health Response

Health response organization / coordination

Four countries (Ethiopia, Somalia, South Sudan, Sudan) out of seven in the GHoA region have an established cluster coordination system including the health cluster with the aim of relieving the suffering and saving lives in humanitarian emergencies, while advancing the well-being and dignity of affected populations. Under the national health cluster, a total of 43 sub-national hubs in the four countries led by WHO have been providing coordination, guidance, and technical assistance to the ongoing crisis. As of the reporting period, a total of 270 health partners were operational with the highest number reported from South Sudan [95].

Table 12: Number of health cluster partners in GHoA countries, June 2023. Global health cluster.

Country	Number of sub national hubs	Number of partners
Ethiopia	10	58
Somalia	14	55
South Sudan	10	111
Sudan	9	46

In **Ethiopia**, the health cluster was activated in 2015 and as of June 2023, 10 sub-national hubs have been established. During the reporting period, a total of 58 partners were operational in the country with 28 of them international NGOs (INGOs), nine national NGOs (NNGOs), five UN agencies, six donors, two observers and one national authority. A total of 17.4 million people are in need of health sector support and 9.8 million of them were targeted. To be able to provide the necessary support, a total of 303 million USD was needed and only 11% of the need has been funded which has continued to affect the response activities [95].

In **Somalia**, the health cluster was activated in 2006 and 14 sub-national hubs were providing the needed support as of June 2023. A total of 55 partners are operational in the country with 21 INGOs, 30 NNGOs and 4 UN agencies. A total of 6.7 million people are in need and 6 million of them have been targeted so far. As of June 2023, only 27% of the 197 million USD needed has been funded and resulted in the interruption of services to the people in need [95].

In **South Sudan**, the health cluster was activated in 2010 and ten sub-national hubs are functioning as of June 2023. A total of 111 partners were operational in the country with 57 of them being NNGOs. 34 INGOs, six UN agencies, 11 donors, two observers and one national authority. A total of 3.5 million people out of the six million in need have been targeted with a total of 128.6 million USD needed. However, only 57% of the need has been funded despite an increased demand due to several emergencies in the country [95].

In **Sudan**, 9 sub-national hubs were functional and providing support to 46 partners consisting of 28 INGOs, 16 NNGOs, five UN agencies, six donors, eight observers and two national authorities as June 2023. Before the start of the crisis, a total of 10.1 million people were in need with 7.6 million of them targeted for support. From the total need, only 6% of 179 million USD needed has been funded [95]. The conflict continued to affect more people and resulting in a significant need for humanitarian support.

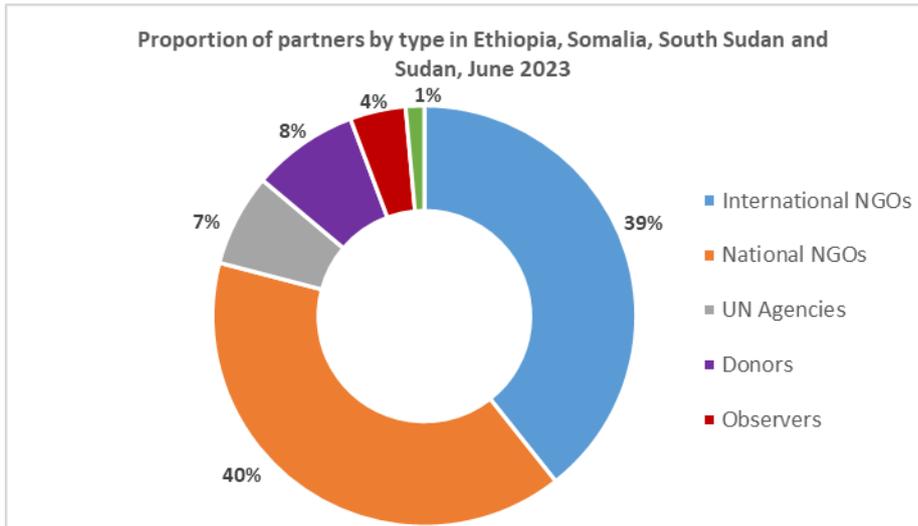


Figure 26: Health cluster partners by type in GHoA region, June 2023. (Global health cluster)

Majority of the health cluster partners in the four countries are national NGO’s (40%) followed by international NGOs (39%), donors (8%) and UN agencies (7%). Ethiopia, South Sudan, and Sudan had a higher number of international NGOs presence during the reporting period [95]. The remaining three countries without cluster coordination system were supported by the existing mechanism and WHO continued to provide the necessary guidance and technical support to MOH for improved planning and response measures.

Despite the need for scaling up and sustaining the humanitarian assistance in the region, partners continued to face funding shortages resulting in interruption of the service provision and scaling down some of their activities. With the presence of multiple disease outbreaks, increased number of people in high level of acute food insecurity and malnutrition, more funding is needed for partners to be able to reach the people in need and contribute to the reduction of morbidity and mortality in the region.

5. Health Information Management landscape, gaps and challenges

Health information management coordination

Following the declaration of the drought and food insecurity crisis in the GHoA region as a Grade 3 emergency in May 2022, the WHO established an incident management support team (IMST) with five strategic objectives to support the crisis response across all seven countries in the region. The IMST plays an important role, supporting member states to respond by strengthening coordination, health information management, surveillance and outbreak response, nutrition action, and essential health services in the most affected areas. Within the GHoA regional IMST, the health information management (HIM) team plays a key coordination function, harmonizing information products at the regional level, synthesizing health, and nutrition related information from countries, providing technical guidance, facilitating collaboration, ensuring consistency of methods and products, and providing a one stop shop for all seven countries.

Health information platforms and surveillance systems

In the GHoA region, countries are using various health management information systems (HMIS) and tools, such as the [Early Warning and Alert Response System](#) (EWARS), the [District Health Information System 2](#) (DHIS2), the [Integrated Disease Surveillance and Response](#) (IDSR) framework, and the [Health Resources and Services Availability Monitoring System](#) (HeRAMS), to collect health-related data at both the sub-national and national level (table 29) [80]. Please refer to the GHoA PHSA July – December 2022 (pp. 24-25) for additional background on these information platforms and surveillance systems [80].

Table 13: Surveillance and health information platforms used by countries in the GHoA region.

	EWARS	DHIS2	IDSR	HeRAMS
Djibouti		√	*	
Ethiopia	√	√	√	√
Kenya		√	√	
Somalia	√	√	√	√
South Sudan	√	√	√	** (HSFS)
Sudan	√	√	*	√
Uganda		√	√	

*Considering or in the process of implementing. Source: EWARS, DHIS2, IDSR and HeRAMS.

**South Sudan has Health Services Functionality System (HSFS) in place of HeRAMS.

Geographic Information System (GIS) Support

The GIS Centre for Health (GISC) deployed a team to support the GHoA IMST and conducted a series of trainings in Ethiopia, Uganda and Djibouti to enhance the GIS capacity of WHO, MoH and NGO staff working in these countries. Over 100 participants were trained between January – June 2023. The trainings covered various topics such as data management, spatial analysis, map production and web mapping. The aim of the trainings was to improve the quality and timeliness of GIS products and services for health decision making and response within a health emergency as well as to foster collaboration among WHO country offices and MoH. The trainings were well received by the participants, who expressed their appreciation and interest in continuing to learn and apply GIS skills in their work.

The GISC continues to provide technical guidance and support for GIS activities in the region and the team continues to follow up with the participants and monitor their progress and challenges. Moreover, the team continues to explore opportunities for further trainings and maintains deployments in Somalia, South Sudan, Sudan and Kenya (GHoA IMST) to sustain and expand the GIS capacity in the GHoA region.

HeRAMS

The Health Resources Availability Monitoring System (HeRAMS) is a comprehensive tool aimed at assessing and improving health service availability and quality in both crisis and non-affected areas. The GHoA IMST in a concerted effort together with WHO Regional Offices and HeRAMS headquarters carried out baseline assessments, feasibility analyses, and awareness sessions to determine the viability and interest in implementing HeRAMS across seven countries—Uganda, Kenya, Sudan, Somalia, South Sudan, Djibouti, and Ethiopia.

Tailored guidance was provided to each country, acknowledging their unique contexts. Notably, Ethiopia has so far managed to proceed with the roll-out of HeRAMS during which WHO country office (WCO) received targeted support, involving the deployment of two GISC experts to Tigray and remote technical assistance for the formulation of the HeRAMS project document.

However, certain challenges emerged as disparities arose due to pre-existing independent monitoring systems in some countries, such as South Sudan ([Health Service Functionality System](#)). Notably, there was less engagement of MoH to roll-out HeRAMS, there were discrepancies in the platforms and HeRAMS modules utilized across the seven countries e.g., Sudan uses an old HeRAMS framework, highlighting the need for harmonization. As the initiative moves forward, a pivotal focus will be on fostering adoption and alignment of platforms among these countries, enabling the harmonization of health service monitoring under the HeRAMS framework. This harmonization will lay the groundwork for meaningful cross-country indicator comparisons and bolster in-country emergency preparedness and response efforts as part of health service delivery in crisis and non-crisis settings.

Gaps and challenges

Table 14: Health information gaps and recommendations for GHoA region

	Gap	Recommended tools / guidance for primary data collection	Progress since previous period
Health status and threats	Nutrition surveillance	Cross-border data sharing for drought affected region	Ongoing discussion with pastoralist nutrition project for digital information system
	Nutrition outcome indicators	Strengthen the data collection and reporting system in countries. Support in developing a dashboard on nutrition interventions	
	Cross-border disease surveillance	Strengthen regional surveillance capacity and work closely with regional offices, IGAD and partners operational	Ongoing but needs to be strengthened
	Disease mortality surveillance	Facility-based mortality surveillance; mortality surveillance study	<u>Somalia</u> : 1 st report on drought related mortality estimate completed and on final stage for the 2 nd one. <u>South Sudan</u> : Proposal has been developed and ongoing resource mobilization to start the estimation soon. <u>Kenya</u> : Ongoing discussion with UNICEF and LSHTM; and in the process of submitting ethical clearance to the MOH in conducting the study soon.

	Mental health – incidence/prevalence /treatment data	Facility-based surveillance, services mapping, data collection on service delivery	
Health system needs	Surveillance system evaluation	Regional evaluation of the disease surveillance system and capacity	Review of the disease and nutrition surveillance systems in place was conducted
	Limited information on attacks on health care from countries in the region	Use of WHO SSA	
Health response coordination	Inter-sectoral coordination	Joint inter-sectoral mapping and performance evaluation/assessment at the national and regional level, Joint product on response activities	
Availability / functionality of health resources	Lack of adequate information on health services availability and functionality	Establish HeRAMS across the GHOA region	Baseline assessments, feasibility analyses, and awareness sessions held to determine the viability and interest in implementing HeRAMS across seven countries. HeRAMS rollout is ongoing in Ethiopia (Tigray finalized), Sudan, and Somalia. HeRAMs discussions are on hold in Kenya, Djibouti, and Uganda. South Sudan has a pre-existing independent Health Service Functionality monitoring system.
Humanitarian health system performance	Inadequate information on partner’s presence, reporting and information sharing	Cluster coordination mechanism, partner’s mapping (3W/4W/5W matrix)	

6. Additional resources

Key documents

1. Drought and Food Insecurity in the Greater Horn of Africa WHO Emergency Page [Drought and food insecurity in the greater Horn of Africa \(who.int\)](#)
2. Public Health Situation Analysis Greater Horn of Africa July 2022 – December 2023 (January 2023) <https://www.who.int/publications/m/item/public-health-situation-analysis--greater-horn-of-africa---january-2023>
3. Situation Report: Greater Horn of Africa Food Insecurity and Health – Grade 3 Emergency – 1 April 2023 – 30 June 2023 <https://www.who.int/publications/m/item/situation-report--greater-horn-of-africa-food-insecurity-and-health---grade-3-emergency---1-april-2023---30-june-2023>
4. Situation Report: Greater Horn of Africa Food Insecurity and Health – Grade 3 Emergency – 1 February 2023 – 31 March 2023 <https://www.who.int/publications/m/item/situation-report-greater-horn-of-africa-food-insecurity-and-health-grade-3-emergency-1-february-31-march-2023>
5. Situation Report: Greater Horn of Africa Food Insecurity and Health – Grade 3 Emergency – 01 January 2023 – 01 February 2023 <https://www.who.int/publications/m/item/situation-report--greater-horn-of-africa-food-insecurity-and-health---grade-3-emergency---1-january-2023---1-february-2023>
6. Snapshot: Greater Horn of Africa food insecurity and health – Grade 3 Emergency: 12 July 2023 <https://www.who.int/publications/m/item/snapshot--greater-horn-of-africa-food-insecurity-and-health--grade-3-emergency--12-july-2023>
7. Regional Emergency Response Appeal for the Greater Horn of Africa 2022 <https://www.who.int/publications/m/item/emergency-response-appeal-greater-horn-of-africa>
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