

SOUTHERN AFRICA

Impact of El Niño in Malawi, Zambia, and Zimbabwe

KEY FIGURES

24M

PEOPLE FACING HUNGER
IN SOUTHERN AFRICA

High risk

OF DISEASE OUTBREAK

APRIL–JUNE

BELOW-AVERAGE
RAINFALL AND
ABOVE-AVERAGE
TEMPERATURES

HUMANITARIAN RESPONSE

- RIASCO
- OCHA
- FAO
- USAID

CRISIS OVERVIEW

Southern Africa is currently struggling with the effects of El Niño, characterised by temperatures and precipitation anomalies that have been resulting in floods, droughts, heatwaves, and below-average rainfall (OCHA 19/04/2024). These have significantly affected livelihoods, agriculture, and food security across several countries. In 2023, Southern Africa faced high food insecurity levels. The subsequent failed rainy season (October–March) in most countries in the region aggravated existing vulnerabilities, such as food insecurity, water scarcity, and health risks (FAO 23/04/2024; OCHA 19/04/2024).

Malawi, Zambia, and Zimbabwe have all declared states of disaster as they experience the worst droughts in decades (Malawi 24 23/03/2024; STC 03/04/2024; AP 04/04/2024). El Niño-induced weather patterns in these three countries have led to below-normal rainfall, crop losses, and widespread food insecurity (FAO 23/04/2024; OCHA 19/04/2024).

Malawi

The rainy season produced normal to below-average rainfall, with episodes of heavy rains in some parts of the country. The rainy season normally runs from October–March but was delayed in 2023 by the effects of El Niño (Malawi 24 23/03/2024 and 10/02/2024; ACAPS accessed 11/04/2024; OCHA/RIASCO 19/04/2024). From November 2023 to March 2024, pluvial and river floods affected Malawi's northern and central districts, which were still recovering from the impact of Cyclone Freddy from March 2023 (IFRC 19/03/2024; Health Cluster 27/03/2024; STC 15/03/2024). El Niño also contributed to heatwaves and high temperatures during the dry season (April–October). The drought and floods disrupted the production of maize, groundnuts, soya beans, cow peas, and rice crops, among others, affecting over two million farming households (Malawi 24 23/03/2024; Africanews 25/03/2024). According to latest data (2022), 62% of the total employment in the country comes from the agricultural sector, which contributed to an estimated 22% of the country's GDP that

year (Africanews 25/03/2024; WB accessed 11/04/2024 a; WB accessed 11/04/2024 b). Between October 2023 and March 2024, an estimated 4.4 million people (22% of the total country's population) faced Crisis (IPC Phase 3) or worse food insecurity levels (IPC 18/08/2023).

Zambia

The climate effects of El Niño have contributed to the mid-season dry spell in Zambia, affecting seven out of ten provinces as at early April 2024 (STC 03/04/2024). The provinces facing the most impacts are Central, Eastern, Lusaka, North-Western, Southern, and Western (IFRC 02/03/2024; STC 03/04/2024). The below-average 2023–2024 rainy season and consequent drought affected about 1 million hectares (2.5 million acres) of the 2.2 million hectares (5.4 million acres) planted with maize, a staple food crop in the country (Lusaka Times 01/03/2024; STC 03/04/2024). Between October 2023 and March 2024, about 2.04 million people (23% of the analysed population) were projected to face IPC 3 or worse food insecurity levels (IPC 13/11/2023).

Zimbabwe

Because of the El Niño-induced drought, more than 80% of the country received below-normal rainfall between mid-November 2023 and February 2024, which is normally when the main rainy season runs (ACAPS accessed 11/04/2024). January–February recorded the least rainfall in four decades (The Guardian 03/04/2024). More than 2.7 million people are projected to face food insecurity in 2024 (OCHA/RIASCO 19/04/2024; AP 04/04/2024; The Guardian 03/04/2024).

ANTICIPATED SCOPE AND SCALE

Seasonal forecasts for April–June anticipate below-average rainfall and above-average temperatures in Malawi, Zambia, and Zimbabwe. These could lead to food and water scarcity, continuing to affect livelihoods, increasing health risks, and triggering displacement. As a result, more people may require humanitarian assistance to cope with these challenges (IRI accessed 09/04/2024; WMO accessed 09/04/2024; OCHA 12/03/2024).

ABOUT THIS REPORT

Aim

This report provides an overview of the climate effects (temperature and precipitation anomalies) and consequent humanitarian impact of the El Niño phenomenon in Southern Africa. It aims to alert the humanitarian community on the short- and long-term consequences of El Niño in the region and inform strategic planning and early action.

Scope

The report covers the Southern African region, with a focus on three countries (Malawi, Zambia, and Zimbabwe) where a state of disaster has been declared as a result of El Niño. These countries were included in a [previous ACAPS thematic analysis](#) on the anticipated impacts of El Niño in 2024. ACAPS had anticipated moderate to severe humanitarian impacts between January–June 2024 resulting from El Niño climate-related hazards, namely variances in rainfall and temperature levels.

Methodology

This report is based on current and historical data on current and previous El Niño impacts in Southern Africa, seasonal climate forecasts, and a secondary data review using local and international media, as well as reporting from humanitarian and development organisations and think tanks. The report also used the [ACAPS Seasonal Calendar](#) as a source.

Limitations

Gathering reliable and current data on agricultural yields, socioeconomic indicators, and other relevant variables can be challenging, especially when it comes to collecting figures on the humanitarian impact in each country. It becomes more challenging to attribute specific weather events or impacts solely to El Niño, as other climate phenomena and local factors may also influence weather patterns and socioeconomic outcomes in the region. At the same time, there is a time delay between the occurrence of El Niño events and the emergence of their impact, making it difficult to precisely link observed changes to a particular El Niño event. Predicting the future impact of El Niño is uncertain, as it depends on various factors, such as the intensity and duration of El Niño events, as well as potential adaptation and mitigation measures undertaken by responders, donors, communities, and governments.

COUNTRY PROFILES

Malawi

In 2024, approximately 9.4 million people, including 4.8 million children, are anticipated to require humanitarian assistance in Malawi (UNICEF 28/12/2023). The impact of climate hazards, such as droughts, cyclones, and floods, drive these needs and lead to below-average crop production. The latter affects livelihoods and worsens food insecurity (WFP 27/03/2024; IPC 18/08/2023). Agriculture highly contributes to Malawi's economy (WFP 27/03/2024). From the latest data, agriculture accounted for nearly 22% of the country's GDP and generated an estimated 80% of national export earnings in 2022 (WB accessed 21/04/2024 a). As at 2022, the agriculture sector employed 62% of the country's workforce, contributing to food and nutrition security (ILO accessed 29/04/2024). Since a great percentage of Malawians work in agriculture, they are vulnerable to the impact of climate-related hazards and variations.

The country's economy is also facing challenges, including unstable inflation rates, foreign currency shortages, and increased food and fuel prices as a result of weather-related shocks, fiscal imbalances, high debt levels, and stagnant economic growth (UNICEF 28/12/2023; FEWS NET 01/03/2024; WB 04/2024; IMF 02/02/2024). Limited financial resources and high prices further affect people's ability to access basic goods (UNICEF 28/12/2023; FEWS NET 01/03/2024).

Malawi's communities affected by Tropical Cyclone Freddy in 2023 are still recovering from the aftermath (Tzu Chi Foundation 06/03/2024; OCHA 24/08/2023). Freddy left more than 659,000 displaced and flooded over 204,800 hectares of cropland (OCHA 13/05/2023). At the same time, a cholera outbreak that began in January 2022 had resulted in over 59,000 confirmed cases and more than 1,700 related deaths as at February 2024 (OCHA 29/02/2024).

Zambia

In 2024, over six million people in Zambia need humanitarian assistance as a result of the effects of climate hazards and climate change (Oxfam 03/04/2024). Zambia is prone to prolonged dry spells, high temperatures, and floods, with drought conditions resulting from El Niño-Southern Oscillation increasing need levels. Communities face pre-existing vulnerabilities to climate-indicted shocks given high poverty rates and socioeconomic instability (ECHO 20/11/2023; WFP 03/04/2024).

More than 50% of Zambia's population lives below the poverty line, with a wide disparity between rural and urban areas. In rural areas, the poverty rate exceeds 75%, whereas it remains at a minimum of 25% in urban areas (WB accessed 21/04/2024 b; ZamStats 2023). In

March 2024, the inflation rate in Zambia rose for the ninth consecutive month, reaching a two-year high of 13.7% in March 2024 compared to 13.5% in February (Zamstats 03/2024; TE accessed 21/04/2024 a). This led to a 15.6% March 2024 annual food inflation compared to 14.1% in the previous month (The Zambia Monitor 28/03/2024). Notably, the current inflation surge, while concerning, remains lower than the levels observed during the economic crisis between 2019–2021 (Macrotrends accessed 29/04/2024).

Climate-related shocks and hazards, such as flooding, prolonged dry spells, pests (fall armyworms), diseases (cassava brown streak virus), and food price increases, are significantly contributing to food insecurity (IPC 13/11/2023). The price of maize, a staple food in Zambia, has increased since the start of the 2022–2023 consumption year and was expected to remain above the five-year average between April 2023 and March 2024 (Africanews 08/03/2024; IPC 13/11/2023). Since January 2023, a cholera outbreak has also spread in all ten provinces of Zambia. As at 31 March 2024, the country had recorded 22,337 confirmed cases and 721 related deaths, resulting in a 3.2% case fatality rate (WHO 01/04/2024).

Zimbabwe

In 2024, at least 2.7 million people require humanitarian assistance in Zimbabwe as a result of the effects of El Niño. Climate-related events, mainly drought, have aggravated humanitarian needs, such as food and livelihood. Drought and aridity in Zimbabwe have also severely affected food production and resulted in food insecurity. Consequent water scarcity and disease outbreaks, such as cholera, are straining health resources and disrupting livelihoods, particularly in agriculture and related sectors (OCHA/RIASCO 19/04/2024; Oxfam 08/04/2024; WHO 01/04/2024).

High inflation, currency devaluation, high dependence on low-productivity agriculture, and climate shocks, including recurrent droughts and floods, are driving persistent poverty and food insecurity in the country (WB accessed 21/04/2024 c; UNICEF 12/04/2024). Zimbabwe's annual blended inflation has been steadily increasing since October 2023; the rate rose from 47.6% in February 2024 to 55.3% in March. Consumer prices rose by 4.9% in March 2024 month-on-month compared to 5.4% in February 2023 (RBZ accessed 21/04/2024; TE accessed 21/04/2024 b). According to the 2023 multidimensional poverty index, the average deprivation score among people living in multidimensional poverty in Zimbabwe was 42.6% of the total population (UNDP accessed 20/04/2024).

More than half of the population in Zimbabwe is employed in the agriculture sector, which contributes only approximately 7% to the country's GDP (WB accessed 22/04/2024 a; WB accessed 22/04/2024 b). This can be attributed to various factors, such as low productivity from subsistence farming, reliance on rain-fed farming, and its seasonal nature (FAO 21/02/2024).

Political instability, tobacco exports, and historical policy decisions also influence the decline in agriculture's role in the economy. The impact of political instability on large-scale commercial agriculture cannot be overlooked (Moyo 26/08/2022). Land reforms, expropriations, and changing policies have disrupted established farming systems (Wits 15/10/2018; Africanews 30/03/2022).

Zimbabwe has long relied on tobacco exports as a major revenue source (Ruckert et al. 03/2022; CNR 13/03/2024). Global declines in tobacco demand and changing market dynamics have affected this sector (WHO 16/01/2024). The sector employs people temporarily, mainly during the planting and harvesting period (WB 11/2017; FAO 21/02/2024; Zimfa accessed 21/04/2024; WB accessed 22/04/2024 a). This means that a significant portion of the population might not have a regular income. At the same time, they are more vulnerable to the impact of weather and climate events, including recurrent drought and floods and the most recent El Niño-induced temperature and rainfall anomalies.

Since February 2023, a cholera outbreak has been affecting all ten provinces of Zimbabwe. As at 31 March 2024, there were 30,643 confirmed cases and 643 related fatalities, representing a case fatality rate of 2.1% (WHO 01/04/2024).

ANTICIPATED AND CURRENT HUMANITARIAN IMPACTS

Food security

Crop failures resulting from El Niño-induced droughts often drive up food prices, making food inaccessible to vulnerable communities, particularly low-income households and groups such as children and pregnant women (FAO/WFP 13/02/2024). In 2024, more than 24 million people in Southern Africa face hunger (Oxfam 03/04/2024). Dry conditions are expected to worsen water access for livestock, leading to an increase in livestock deaths. This, in turn, will have a further impact on food security (OCHA 29/03/2024).

In Malawi, from October 2023 to March 2024, an estimated 4.4 million (22% of the assessed population) experienced IPC 3 or worse food insecurity (IPC 18/08/2023). These numbers are likely to increase in the February–May 2024 period, compounded by the impact of cyclones since 2019, below-normal rainfall during the next rainy season (October to March), and food stock depletion (ACAPS accessed 21/04/2024; FEWS NET 02/2024 a). Poor households are expected to adopt coping strategies with harmful consequences, such as consuming insufficient quantities and/or quality of food and eating only two food groups per day. They are likely to face IPC 3 food insecurity outcomes from February–May 2024 period (FEWS NET 02/2024 a).

In Zambia, El Niño-induced drought affected over one million hectares of cropland during the 2023–2024 rainy and planting season, with February recording the driest and hottest month since 1981. The dry conditions are expected to decrease crop production in affected regions, increasing food insecurity. Cereal production is forecast to decrease by almost 50%, worsening food insecurity after the main harvest period (April–June) (FSC/WFP 12/04/2024; ACAPS accessed 21/04/2024).

In Zimbabwe, the 2023–2024 rainy season has been erratic, characterised by prolonged dry spells significantly affecting crop growth and livestock pasture and water (FEWS NET 02/2024 b). This will likely affect the yields from the main harvest period (April–June 2024) for staple foods, such as millet and maize, leading to poor households facing IPC 3 outcomes across most of the deficit-producing areas during the post-harvest period (June–September) (FEWS NET 02/2024 b; ACAPS accessed 21/04/2024). During these months, food insecurity is likely to heighten as the fast depletion of the limited harvest forces households to adopt coping strategies with negative outcomes, such as poor diet and reduced food consumption (FEWS NET 02/2024 b).

Nutrition

As at March 2024, an estimated 21 million children were experiencing malnutrition in Southern Africa, an increase from 18.6 million in 2022.

Climate events, including El Niño-induced drought, have worsened food insecurity, consequently contributing to higher malnutrition rates (OCHA/RIASCO 12/03/2024; FAO/WFP 13/02/2024).

In Zimbabwe, the poor harvest season (April–June 2024) is expected to force poor households to adopt coping mechanisms with potentially negative consequences between June–September (WFP 19/04/2024; ACAPS accessed 21/04/2024). These strategies may include reduced diets, cutting the number of meals a day, and decreased healthcare spending, which may increase acute malnutrition rates (FEWS NET 02/2024 b).

In Malawi, there was a significant increase in severe acute malnutrition cases from December 2023 to March 2024. A 7% increase was already recorded from January 2022 to January 2023 (FEWS NET 02/2024 a). This increase may be a result of reduced labour opportunities affecting access to food and dietary diversity. Food access challenges are evident, especially during the peak lean season (February–March). Malnutrition levels were expected to deteriorate during the lean season from December 2023 to March 2024, with some in southern Malawi districts facing Alert global acute malnutrition (GAM) levels (5–9.9% (FEWS NET 02/2024 a; ACAPS accessed 21/04/2024).

As at the end of 2023, Zambia had one of the highest malnutrition rates globally, with micronutrient deficiencies at 31%. GAM rates were at 4.2%, slightly close to the WHO-recommended limit (GAM <5%) (Global Nutrition Cluster/USAID accessed 22/04/2024; WFP 02/04/2024). Over 50% of the households in Zambia could not afford a nutritious diet, contributing to malnutrition prevalence (WFP 02/04/2024). El Niño is expected to increase the risk of malnutrition as it results in insufficient produce and higher food prices.

The high annual food inflation rate (currently at 15.6%) could further worsen food insecurity and increase the risk of malnutrition across the country in 2024. If food becomes even less accessible, people might adopt more coping strategies with harmful outcomes, including cutting meals and eating less nutritious food (ZamStats 03/2024; TE accessed 21/04/2024 a).

Protection

El Niño-induced drought leading to food and water scarcity can also increase protection needs for the affected communities. Families are likely to be forced to prioritise their basic needs over education, making children more prone to dropping out of school. This vulnerability exposes them to child labour and child marriage, which can significantly affect their future (OCHA/RIASCO 12/03/2024; FAO 13/02/2024).

Protection risks for women and girls in all three countries are likely to increase in 2024. Diminishing water availability may force them to travel long distances to collect water, increasing their susceptibility to gender-based violence (UNICEF 12/12/2023; OCHA 19/04/2024).

Livelihoods

The effects of El Niño climatic conditions are expected to have severe consequences on the livelihoods of people living in Southern Africa. Approximately 70% of the population in the region relies on agriculture for subsistence. Communities affected by El Niño are projected to have lower crop yields and fewer opportunities to make a living. The 2024–2025 lean season, which usually begins in November in the three countries, is expected to start earlier and be more significant than usual (OCHA/RIASCO 12/03/2024; ACAPS accessed 09/04/2024).

There have been record-dry conditions across Zimbabwe since mid-January 2024, particularly across the central and northern regions, which are usually surplus-producing areas. The rainy season runs from November–February (FEWS NET 02/2024 b; ACAPS accessed 21/04/2024). As a result of unfavourable weather conditions, the 2024 harvest is expected to be poor, resulting in limited income-earning opportunities (FEWS NET 02/2024 b; FEWS NET 03/2024).

El Niño is expected to worsen living conditions and affect livelihoods in Malawi. Flooding and below-normal rainfall will cause below-average livestock herd sizes. From June–September 2024, agricultural and non-agricultural labour incomes will be below average in central and southern Malawi. In northern Malawi, below-average production will limit employment opportunities (FEWS NET 02/2024 a).

In Zambia, the significant disparity between rural and urban poverty levels reveals the extent of inequality in the country (ZamStats 2023). El Niño weather phenomenon can aggravate the situation, posing a severe risk to the livelihoods of small-scale farmers and worsening existing poverty conditions.

Economy

Economic growth in Zimbabwe is expected to drop from 5.5% in 2023 to 3.5% in 2024 (Reuters 30/11/2023; New Zimbabwe 04/11/2023). This slowdown is anticipated given the combined effects of a global economic downturn and the expected below-average precipitation associated with El Niño, which could affect agricultural production in a sector that employs more than half the population (WB accessed 22/04/2024 a; Reuters 30/11/2023).

Zimbabwe's heavy reliance on hydropower from the Kariba Dam faces a significant challenge in El Niño-induced droughts. This could affect the electricity supply and economic productivity. The water level at Kariba Dam has experienced fluctuations; as at 22 April 2024, it stood at 477.49m above sea level (equivalent to 13.80% usable storage). This is in comparison to the same date last year when it was at 478.90m (23.83% usable storage) (Zambezi RA accessed 20/04/2024).

Zambia also heavily relies on hydropower for electricity generation, making it vulnerable to climate- and climate change-related shocks, such as droughts (UNFCCC 05/07/2018; JCTR 03/04/2024). The prolonged dry spell has resulted in load shedding and is expected to have significant negative implications on the country's economic growth, particularly in the agriculture, energy, and tourism sectors. Copper mining also provides livelihoods for thousands of Zambians, both directly (miners, technicians, engineers) and indirectly (support services, transportation). Reduced copper production will affect these livelihoods, potentially leading to job losses and income instability (IFPRI 10/11/2023 a; JCTR 03/04/2024).

As previously mentioned in this report, agriculture also contributes a significant percentage to the country's GDP and national exports. Below-average rainfall affecting crop growth and leading to reduced yields will slow down economic growth (IFPRI 10/11/2023 b; WB accessed 21/04/2024 a; MOAIWD 09/2021).

Health

In Southern Africa, water scarcity caused by drought or dry conditions has severe implications for public health. The unavailability of safe water sources can lead to an upsurge in waterborne diseases, such as cholera, typhoid, bilharzia, and trachoma. Vector-borne diseases, such as yellow fever, malaria, and dengue, also often thrive in dry conditions (OCHA 29/02/2024; Pulitzer Center 17/02/2024). Floods resulting from the effects of El Niño heighten the risk of outbreaks of diseases such as malaria, as mosquitoes find a breeding habitat, and waterborne diseases through the use of contaminated water (WHO 30/11/2023; OCHA 29/02/2024).

Malawi, Zambia, and Zimbabwe will experience higher-than-normal temperatures from May to July 2024. This could exacerbate the existing water scarcity issue caused by lower-than-average rainfall, which may force affected communities to resort to using unsafe and contaminated water (IRI Accessed 22/04/2024 ; FEWS NET 02/2024 ; FEWS NET 03/2024 ; Save the Children 03/04/2024). This would increase the risk of endemic diseases, such as cholera. The use of contaminated water could potentially lead to an increase in the rate of infection of an already ongoing cholera concern in the three countries (IRI Accessed 22/04/2024 ; WHO 31/03/2024 ; UNICEF 21/04/2024).

Zimbabwe's health system is currently struggling to cope with the ongoing cholera outbreak, as well as a polio outbreak that was declared in October 2023. If any other outbreak were to occur in the country, it could further strain the health system's capacity, potentially reducing its ability to respond effectively (WHO 31/03/2024 ; UNICEF 12/04/2024).

Displacement

The combination of food insecurity, water scarcity, and economic hardships caused by El Niño makes communities more vulnerable to displacement (OCHA 13/03/2024). Families facing extreme challenges due to the impact of El Niño may be compelled to leave their homes in search of assistance, better living conditions, or better economic opportunities (OCHA 13/03/2024 ; FAO 13/02/2024).

From February to early March 2024, El Niño induced rains caused floods in two districts in Malawi, namely Nkhotakota and Karonga (UNICEF 19/03/2024). The floods caused damage to basic infrastructure including houses, displacing more than 10,000 people as at 6 March 2024 (UNICEF 19/03/2024 ; ECHO 06/03/2024). The displaced are sheltering in schools, churches, and other safe locations in the affected districts and are in need of temporary shelter, food and non-food items (NFIs), and sanitation facilities (UNICEF 19/03/2024 ; ECHO 06/03/2024 ; IFRC 19/03/2024).

Although there have not been specific events to point out directly to resource-based competition in the three countries, this remains a moderate to high risk. As resources become increasingly scarce, individuals with livestock can be forced to seek out new pastures and water sources. The heightened competition for these essential resources during periods of environmental stress, such as those caused by El Niño, might lead to conflicts over land, water, and other necessities. This can result in risks of displacement, as people are forced to leave areas affected by resource-related disputes (FAO 13/02/2024 ; Zimfacts 13/11/2023).

HUMANITARIAN RESPONSE

The humanitarian community and governments have put in place various programmes to address humanitarian needs arising from El Niño impacts in Southern Africa. These regional programmes are focused on building resilience and providing food, health, and nutrition assistance to affected communities. Efforts are coordinated through a network focused on early warning systems and response initiatives (USAID 31/01/2024).

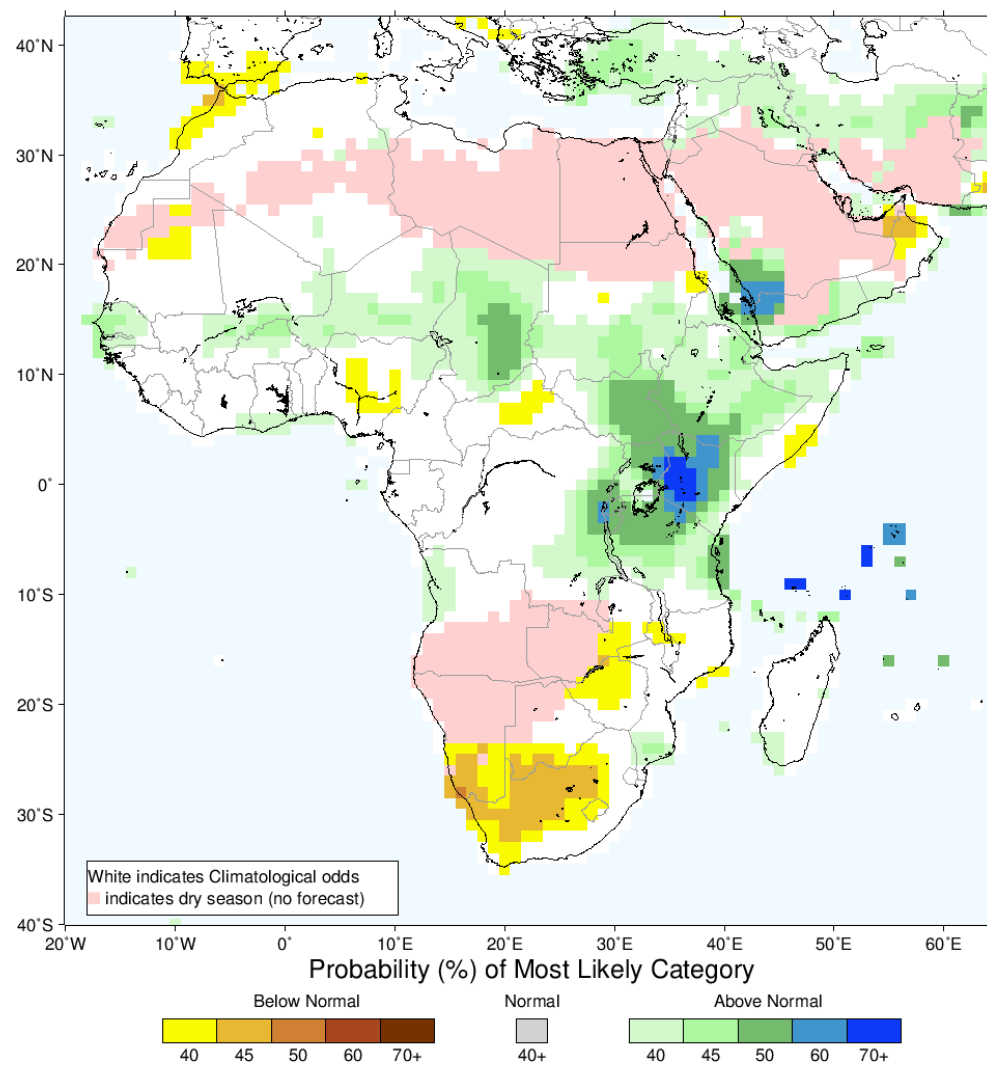
A phased plan for El Niño Preparedness and Response has been created for the Southern Africa region, encompassing anticipatory actions, emergency response, and resilience building. This plan aims to assist regional institutions and governments in preparing for and responding to El Niño events. Attention is being drawn to previous impacts on food security and nutrition, along with lessons learned for future responses (FAO 13/02/2024).

A high-level forum, the Regional Interagency Standing Committee (RIASCO), is addressing operational and strategic issues related to humanitarian assistance in Southern Africa. The forum has established a task force to providing guidance to stakeholders, donors, and responders on responding to the impacts of El Niño in the region (RIASCO 12/03/2024)

Efforts are underway to ensure the effective delivery of aid and assistance in Southern Africa to address the needs generated by the effects of El Niño. Coordination, advocacy, information sharing, and community engagement are central to these endeavours (OCHA 12/03/2024).

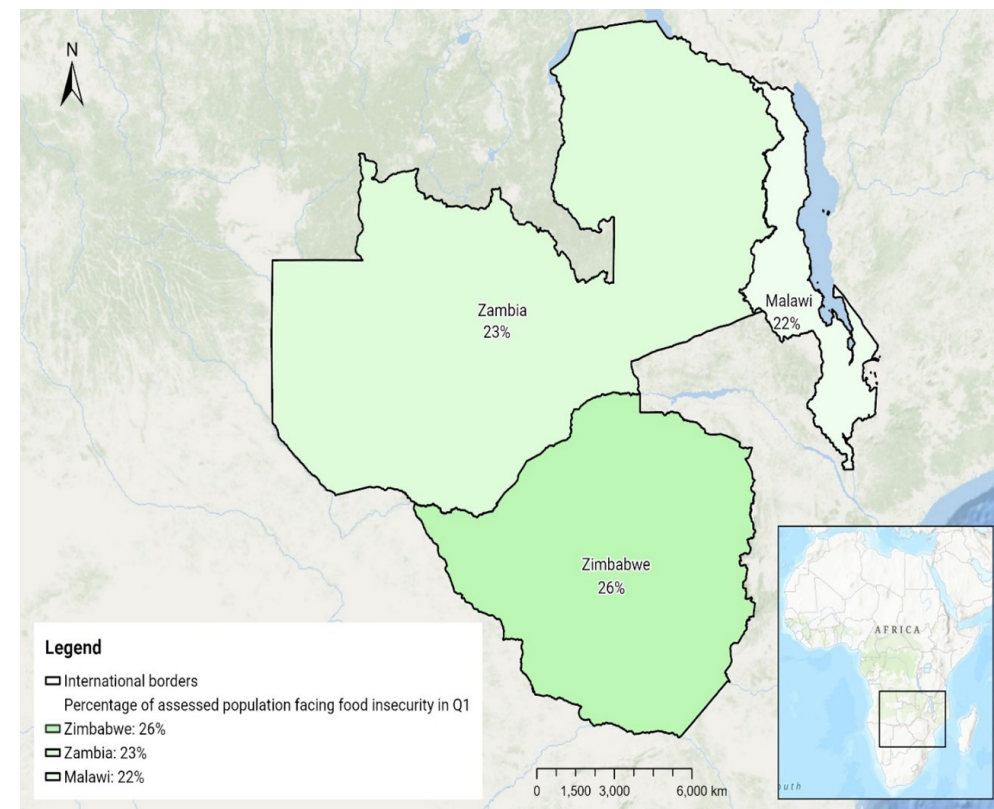
Given the severity of the situation and the urgent need for assistance, humanitarian responders in Southern Africa have appealed for funding to address the various needs arising from the El Niño-induced crisis (OCHA 12/03/2024 ; Oxfam 04/04/2024).

Map 1: IRI Multi-Model Probability Forecast for Precipitation for May, June and July 2024



(IRI accessed 29/04/2024)

Map 2: Percentage of the assessed population facing food insecurity in the first quarter of 2024



Source: ACAPS using data from (IPC 13/11/2023 ; IPC 18/08/2023 ; WFP 27/03/2024)