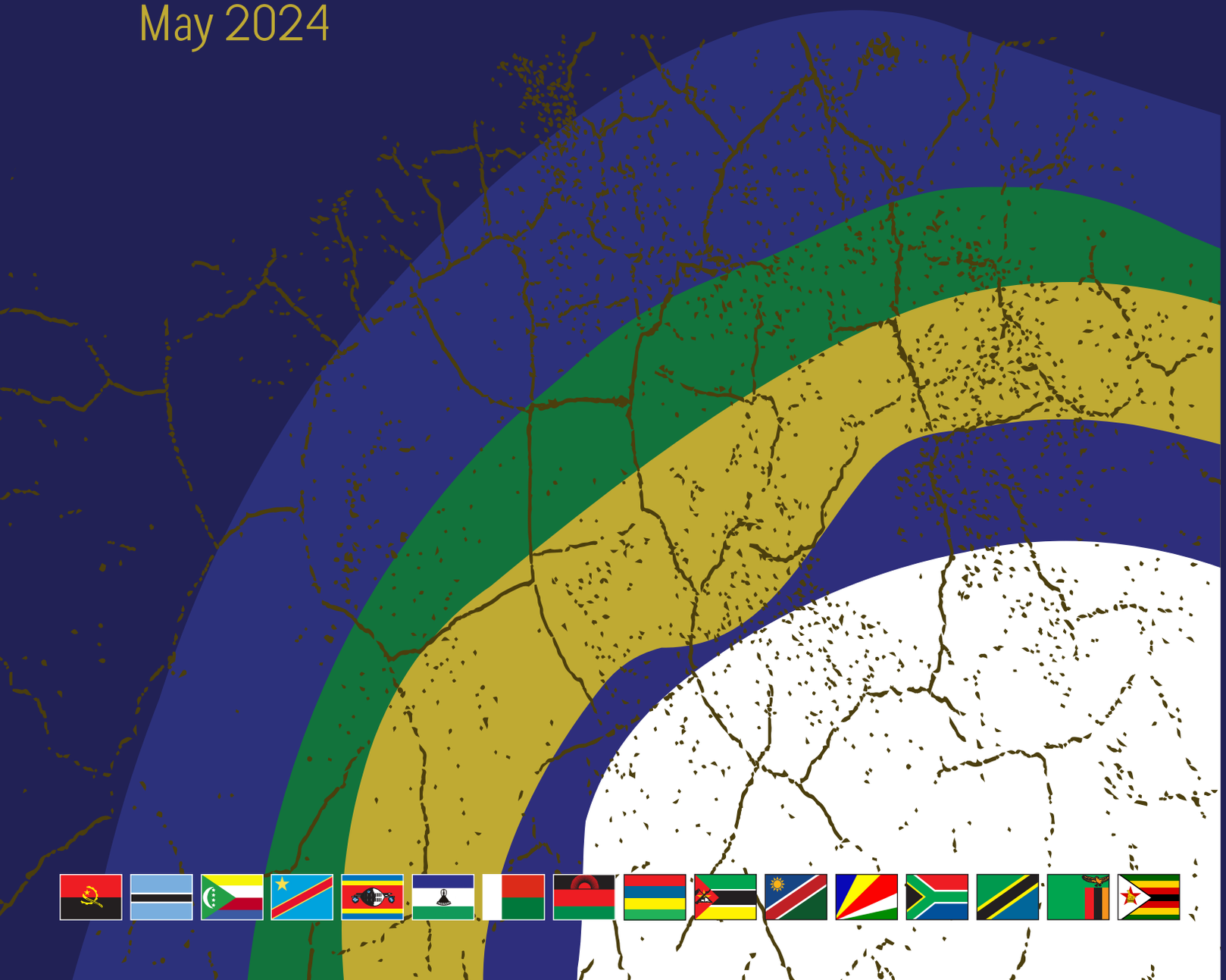
SADC Regional Humanitarian Appeal

Response to the El Nino Induced Drought and Floods

May 2024



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About SADC

The Southern African Development Community (SADC) is an organisation founded and maintained by countries in Southern Africa that aims to further socio-economic, political, and security cooperation among its Member States and foster regional integration in order to achieve peace, stability, and wealth. The Member States are: Angola, Botswana, the Union of Comoros, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe.

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1. Statement by SADC Chairperson

His Excellency João Manuel Gonçalves Lourenço, **the President of the Republic of Angola and SADC Chairperson**

The SADC region once again faces a humanitarian crisis as a result of the ongoing El Niño induced drought that is negatively impacting the lives and livelihoods of around 61.7 million people. The drought is happening concurrently with flash floods and landslides from heavy rains emanating from Tropical Cyclones Gamane and Filipo that ravaged Madagascar and Belal that passed close to Mauritius in January, bringing heavy rainfall and strong winds. The cyclones caused floods resulting in the loss of lives, displacement of people and damage to infrastructure and property. The cyclones also had spill over impacts in Eswatini, Malawi, Mozambique, and Tanzania where heavy rains caused flash floods leading to displacements of people and damage to infrastructure and property.

The El Niño induced drought has led to water deficits which have caused crop failure and reduction in vegetation growth for livestock and wildlife leading to over 9 thousand drought-related cattle deaths, while over 1.4 million cattle have been reported as being at high risk of death due to lack of pasture and water in Zimbabwe. The lack of water and pasture has also led to increased human-wildlife conflict that has resulted in loss of lives. Unsafe sources of water have increased the risks and outbreaks of water borne diseases such as cholera which had already affected several SADC Countries including the Democratic Republic of Congo (DRC), Malawi, Mozambique, Zambia and Zimbabwe and led to the loss of over 3000 lives between 2023 and 2024.

Analysis of the rainfall events indicate that Southern and Central parts of the region received well below average seasonal rainfall while the central and south-eastern parts of the region experienced extremely dry, hot conditions, for over 50 consecutive days in some parts. The areas affected by the severe dry spells had the lowest rainfall in 43 years. Further, analysis by climate experts shows that for central parts of the region, this year had the driest month of February in over 100 years. In contrast, some areas in the north eastern parts of the region experienced one of its wettest rainfall periods between late January and early March causing flooding, landslides and damage to crops and critical infrastructure.

The drought and the flood events are happening at a time when the region is only emerging from the impacts of six (6) tropical cyclones namely Moderate Tropical Storm Ana, Intense Tropical Cyclone Batsirai, Tropical Storm Dumako, Tropical Cyclone Emnati, Severe Tropical Storm Gombe, Tropical Storm Jasmine, and Tropical Cyclone Freddy and a low pressure system in Kwazulu Natal, South Africa that battered the region in 2022 and Tropical Cyclone Freddy that hit the region severely affecting Malawi in 2023. The cyclones resulted in the loss of lives and livelihoods, displacement of people and damage to infrastructure and property.

The region is making every effort to manage and respond to the impacts of the 2023/24 El Niño and related tropical cyclones. However, the severity of the drought, and the severity and frequency of tropical cyclones has overwhelmed the response capacity of most of the affected Member States. Consequently, the region is issuing this Regional Appeal for Humanitarian Assistance to support the ongoing response and recovery efforts by Member States.

I, therefore, on behalf of SADC, issue this appeal to bring to the attention of the World, the plight of millions of citizens of our region. This is to ensure that our communities and citizens are not only able to survive the threats and impacts posed by the drought and tropical cyclones but are able to survive and rebuild their lives.

This Appeal is meant to augment the response efforts of individual Member States, supported by national and regional and international partners. I wish to assure partners that SADC Member States are already doing a lot in building the resilience of communities and sectors to future shocks.

Finally, may I appeal to Member States that are able, to render support to the affected countries in solidarity. To our partners and the international community, I call upon your goodwill to assist the region. With your support, we can prevent loss of lives and rebuild the livelihoods of our vulnerable people in the region as well as our economies in the region.

2. Preface by SADC Executive Secretary

Mr. Elias M. Magosi, **Executive Secretary, Southern African Development Community**

According to the SADC Regional Vulnerability Assessment and Analysis Programme Synthesis Report for the 2023/24 season, an estimated 56.8 million people are currently food insecure in the region, among the twelve Member States (Botswana, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe) that provided results of their assessments. In addition, the performance of rainfall in the region during the 2023/24 season has been characterized by extensive El Niño induced dry spells over large parts of Angola, Botswana, Madagascar, Malawi, Mozambique, Namibia, South Africa, Lesotho, Zambia, and Zimbabwe. In contrast, north eastern parts of the region including parts of Malawi, Mozambique and Tanzania were affected by excessive rainfall that caused extensive flooding. Further, Madagascar and parts of Mozambique were battered by tropical cyclones that caused loss of life and damage to property.

Due to the negative impacts of the El Niño induced drought, flooding and cyclones, Malawi, Zambia and Mozambique declared national drought disasters. In view of the unfolding disasters, SADC Council, at its meeting in March 2024 in Luanda, Angola, directed the SADC Secretariat to develop a regional appeal to facilitate coordinated response to the various disaster affecting the region.

Following the Council directive, the Secretariat, with approval of the Chairperson of SADC, His Excellency João Manuel Gonçalves Lourenço, developed this Regional Appeal for Humanitarian Assistance, in close coordination with the Regional Inter-Agency Standing Committee (RIASCO), which is made up of relevant regional and international humanitarian agencies within the SADC region including UN Agencies.

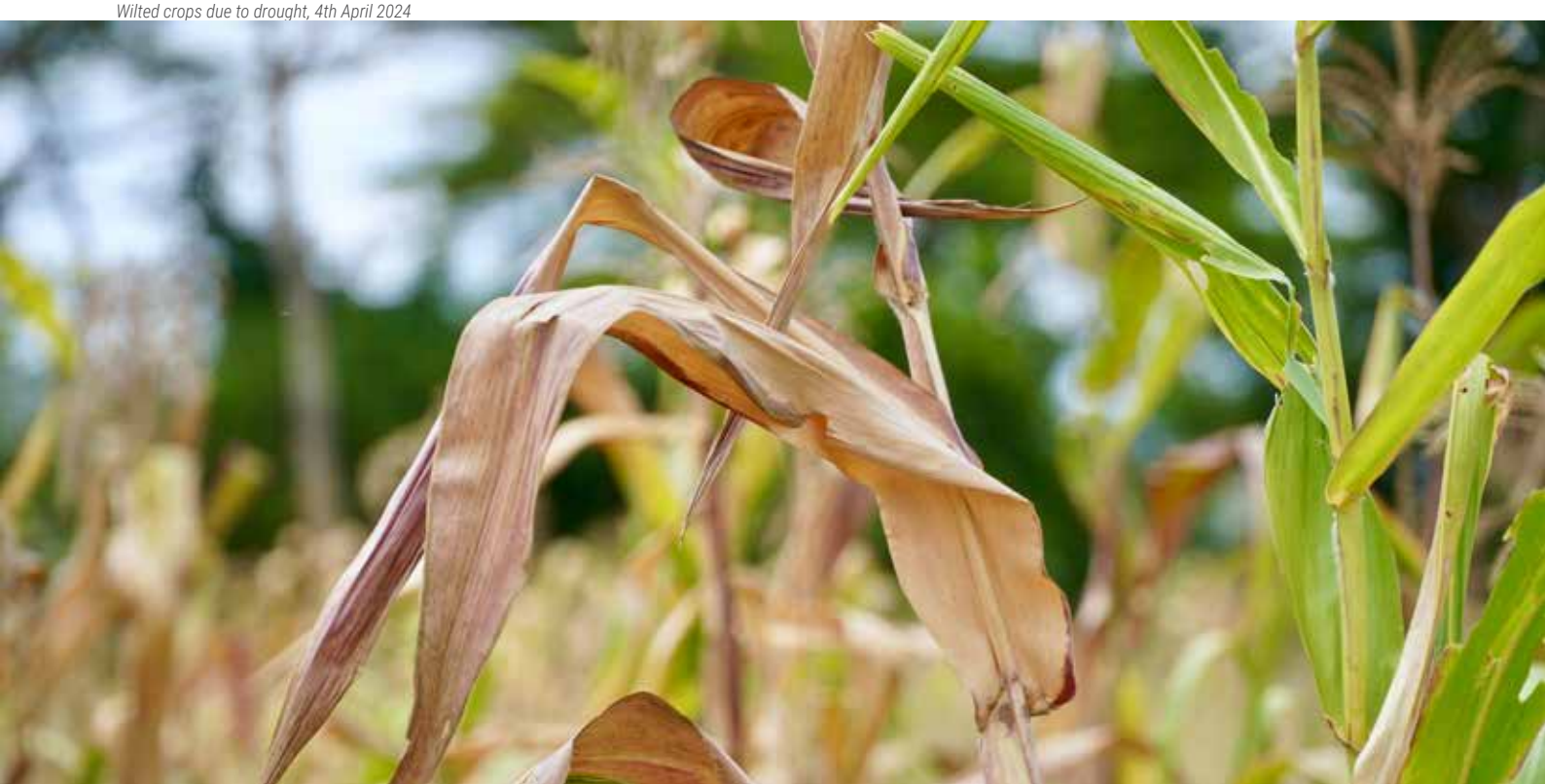
The Appeal document highlights the numbers of people affected and their prioritized needs, the ongoing response efforts and gaps at both national and regional levels. It also gives recommendations for resilience building and rebuilding the lives of those affected moving forward.

We look forward to immediate and strong support from regional and international partners as we embark on the mobilization of resources to support the affected populations. While support may be provided through SADC Secretariat, we encourage those that are willing to channel their support directly to the affected Member States and inform the SADC Secretariat for monitoring and reporting purposes.

I take this opportunity to thank partners who have unwaveringly continued to support the region in all its development endeavors.

MADAGASCAR

Wilted crops due to drought, 4th April 2024



At a Glance

61.7M People in need

$5.5B Funding requirements

50M Food insecure people (40M in IPC3+ or comparable)

17.4M People in need (Water, Sanitation and Hygiene)

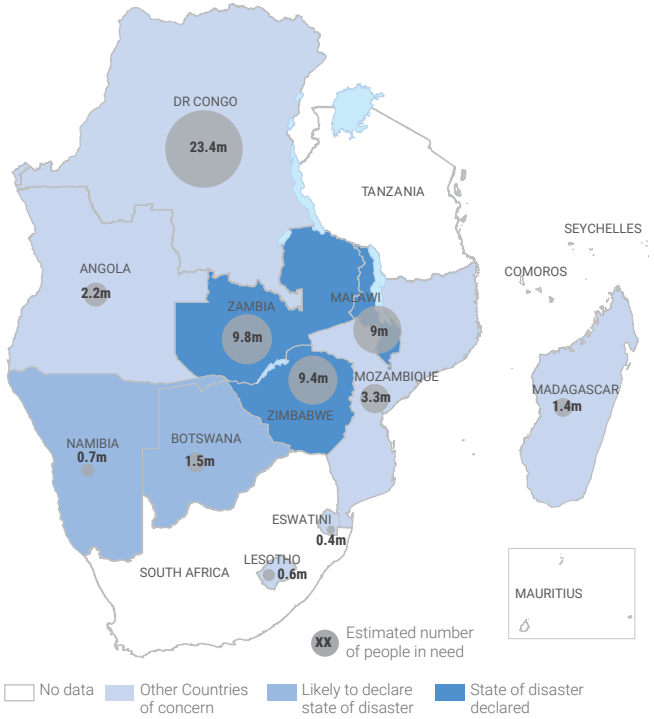
9.9M People in need (Nutrition support)

70K Cholera cases

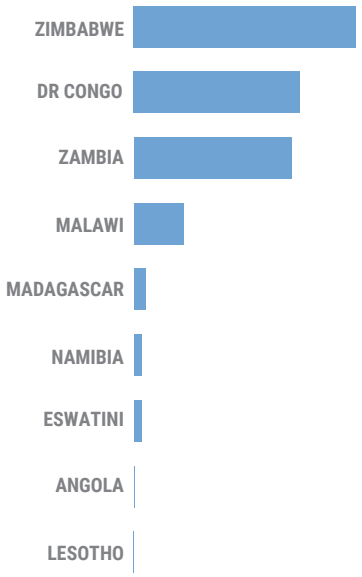
4.9M Livestock deaths

2.7M Hectares loss of farmland

PEOPLE IN NEED BY COUNTRY



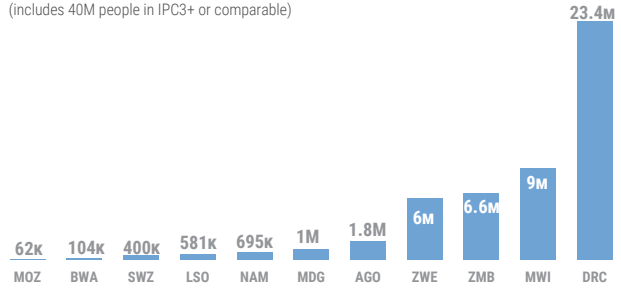
OVERALL FUNDING REQUIREMENTS US$



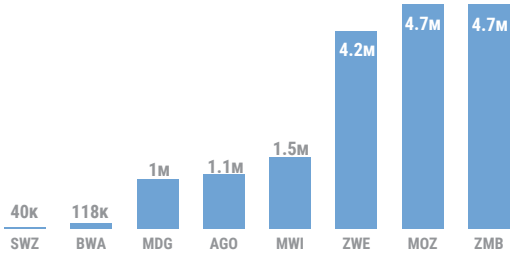
	Required	Funded	Funding Gap
ZIMBABWE	$2.12B	$109.7M	$2.01B
DR CONGO	$1.5B		$1.5B
ZAMBIA	$1.42B	$51.2M	$1.37B
MALAWI	$446.7M	$21.6M	$425.1M
MADAGASCAR	$108.1M		$108.1M
NAMIBIA	$70.7M	$42.7m	$28M
ESWATINI	$66M		$66M
ANGOLA	$3.25M		$3.25M
LESOTHO	$2.25M		$2.25M
	$5.74B	$225M	$5.51B

FOOD INSECURE PEOPLE BY COUNTRY

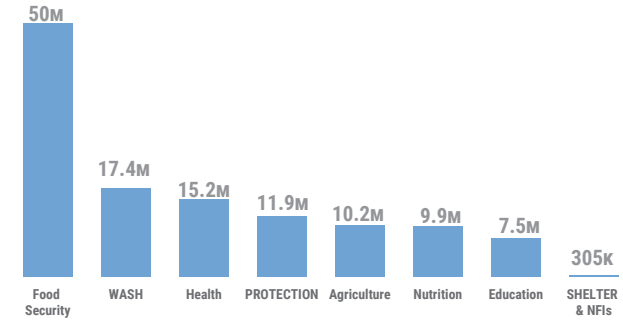
(includes 40M people in IPC3+ or comparable)



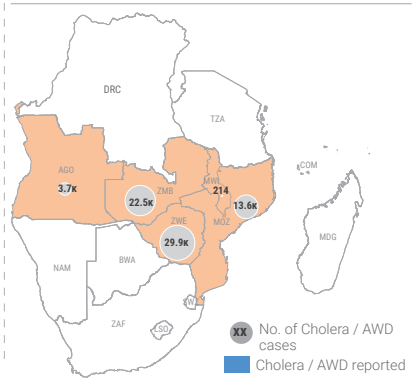
WASH (PEOPLE IN NEED) BY COUNTRY



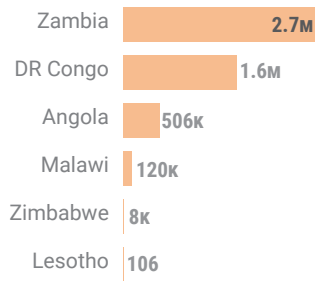
PEOPLE IN NEED BY SECTOR



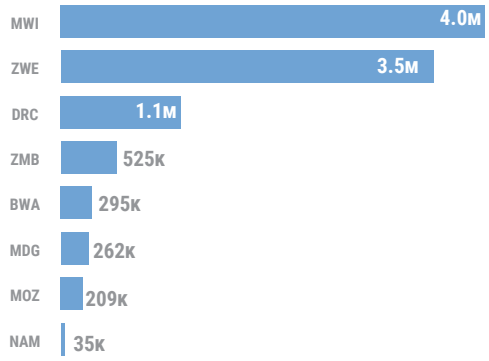
CHOLERA CASES



LIVESTOCK DEATHS



NUTRITION (PEOPLE IN NEED) BY COUNTRY



Creation date: 14 May 2024 **Sources:** SADC DRR, Member States.

4. Executive Summary

A climate and food security crisis is unfolding across Southern Africa as an El Niño-induced drought brings about crop failure and immediate need for humanitarian assistance which have been exacerbated by rising food prices, cholera outbreaks, and ongoing macroeconomic challenges.

The region's just-concluded rainfall season was characterized by extensive dry spells over large parts of Angola, Botswana, Madagascar, Malawi, Mozambique, Namibia, South Africa, Lesotho, Zambia, and Zimbabwe. For many of these areas it was the driest February on record, accompanied by a month-long heat wave with temperatures 5 degrees above average, when moisture was most critical for plant development.

Below-average maize harvests are expected in 2024, with potential for extensive crop failures in parts of the region. Malawi, Zambia, and Zimbabwe have declared national drought disasters. Twenty-three out of Twenty-eight districts in Malawi have been affected by the El Niño conditions, and a preliminary assessment by the government estimated that up to 2 million farming households and 44 percent of the national cropping area have been affected. In Zambia, 1 million hectares of the 2.2 million hectares planted with maize have been affected. Namibia has instituted drought relief measures to mitigate the impact on agriculture.

The drought is hitting during a time of already alarming levels of food insecurity. In March, at the end of the last lean season, an estimated 18.6 million people were expected to be in Crisis or worse (IPC Phase 3 or above) levels of food insecurity in drought-affected Member States. Assessments of the impact of the El Niño are ongoing across Member States. This Regional Appeal for Humanitarian Assistance should allow for response planning over the short and medium term.

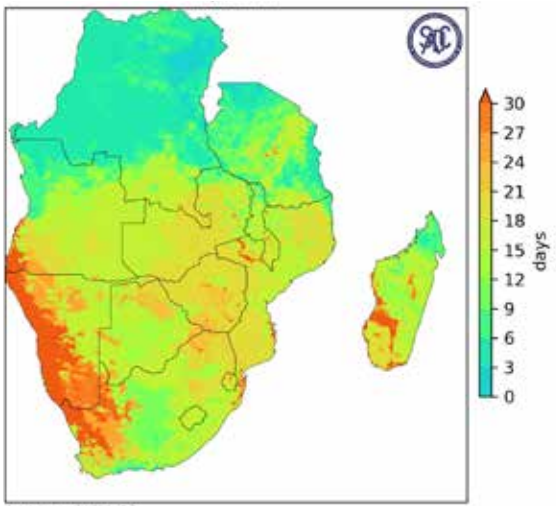
MALAWI
Photo: DoDMA

5. Regional Situation

a) El Niño impacts

Delayed onset, record mid-season dry spell and extreme temperatures.

Recorded maximum consecutive dry days
April 2024



Recorded daytime heat wave days
April 2024

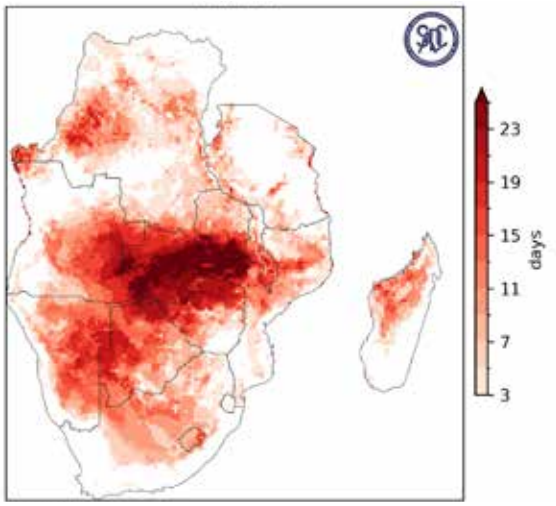


Figure 1. (a) Dry spells and (b) heat waves experienced during February 2024

The 2023/2024 El Niño event caused widespread drought conditions across southern Africa, characterized by a late onset of rains, extended mid-season dry spells, and extreme high temperatures. El Niño typically results in hotter and drier than usual conditions in southern Africa, but this season was characterized by record dry conditions in many areas. The onset of rains, which usually occurs in November in most parts of the region, was delayed by as much as 30 days in central areas, including south-eastern Angola, northern Botswana, southern Malawi, southern Mozambique, northern Namibia, north-western South Africa, southern and central Zambia and central Zimbabwe. In many of these areas, November rainfall was the lowest on record, dating as far back as in 1981. The low November rainfall contributed to reductions in areas planted to crops.

Following a brief respite in December and January, a severe mid-season dry spell ensued. From 21 January to 31 March 2024, extremely dry and hot conditions were experienced in south-eastern Angola, most of Botswana, southern DRC, Lesotho, southern Malawi, central and southern Mozambique, most of Namibia, central South Africa, most of Zambia, and most of Zimbabwe. Many central areas experienced prolonged dry spells that lasted for over 50 days, with little to no rainfall occurring during the critical flowering period of crop growth. The dry conditions were most severe in central parts of the region, where February rainfall was the lowest on record, for over 100 years, for the area covering south-eastern Angola, most of Botswana, southern Malawi, north-eastern Namibia, most of Zambia and most of Zimbabwe. The February rainfall totals over this area is comparable to, but lower than 1992, a year that recorded severe drought impacts. This mid-season dryness marked in some cases an effective end of the cropping season.

Widespread crop failure due to severe crop water deficits

The extended dry conditions have had a widespread, severe impact on crops, as it occurred at a time when cereal crops are generally most susceptible to water deficits. Field observations, reports, early crop assessments, and crop modelling results indicate that severe soil moisture deficits caused extensive permanent wilting of crops in many central areas including Malawi, Namibia, Zambia, and Zimbabwe, and widespread crop failure occurred. Across the southern half of the region, many areas experienced significant crop water deficits resulting in reduced crop yields. Malawi, Zambia and Zimbabwe have declared a state of national disaster due to the drought. Malawi's official 2nd round crop estimates indicate a 2023/24 maize production of 2.93 million MT, 23% below the 5-year average. Preliminary estimates from Namibia's Ministry of Agriculture, Water and Land Reform

indicate that cereal production this season is expected at 47% below the 5-year average cereal production. South Africa was also affected by the drought conditions, and their updated crop production estimates released on 25 April includes a revised maize production estimate of 13.97 million metric tons (MT), down 10.2% down from the 5 year average, primarily as a result of the February-March dry conditions. In Zambia, 982,765 hectares of maize, 43% of the planted area, was destroyed by the drought. Zimbabwe crop production figures estimate a cereal harvest of 744,271 MT, representing a drop of 71% from the previous season. Many of the areas that have suffered reduced crop production due to the drought include typical surplus producing areas that normally export grain to other Member States within the region.

The United Republic of Tanzania has a surplus of 4 million tonnes of maize grains for possible trade with Member States facing deficits. Neighbouring Democratic Republic of Congo, Malawi and Zambia should consider that market.

Degraded pasture, poor livestock condition and drought-related livestock deaths

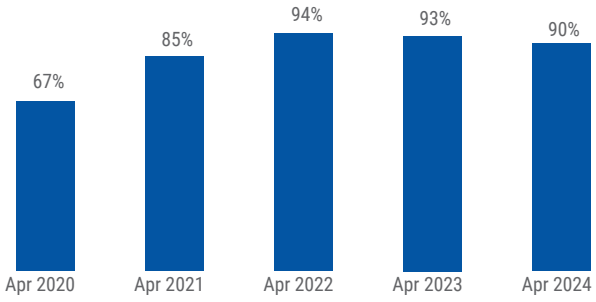
Livestock have also been impacted by the El Niño-induced dry conditions, due to considerable deterioration in vegetation conditions across the southern half of the region this season, as well as reduced water availability for livestock. Satellite-based vegetation indices (NDVI) used for large scale monitoring of vegetation conditions were below average throughout March 2024 in large areas of southern Angola, Botswana, Lesotho, southern and central Mozambique, Namibia, South Africa, southern/western Zambia, and Zimbabwe. Many of the areas with poor vegetation conditions are primarily grassland areas where livestock is an important livelihood asset. Pasture and livestock were reported to be in poor condition in Zambia due to the dry conditions in the previous and the current seasons. In Namibia, "distress grazing conditions", inadequate for livestock, were reported in most parts of the country due to the dry conditions. As a result, livestock in parts of Namibia were in poor body condition. In Zimbabwe, a total of 9,941 drought-related cattle deaths were reported at the beginning of the season; 47% of the country's wards are expected to face critical grazing shortages from July 2024, while 76% are expected to face challenges in drinking water for livestock. In Zambia, the drought has reduced pasture for livestock. Provinces in Zambia affected by the drought are host to 76% of the country's livestock. In Botswana, wildlife was also affected by the dry conditions. Although up-to-date information on impact on livestock and wildlife is still being compiled, the rainfall patterns and vegetation conditions observed from satellite and ground observations indicate that livestock and wildlife will face severe challenges due to shortages in pasture and water availability.

Surface and groundwater levels decrease

The El Niño-induced dry conditions experienced in the central parts of the SADC region pose significant challenges to water resources. Given the reduced rainfall and extended dry spells, water levels in reservoirs, rivers, and groundwater sources are likely to diminish, impacting irrigation capacities, hydroelectric power generation, drinking water supplies and ecosystem health. Monitoring by the Zambezi River Authority suggests that as of 20 April, the Kariba dam was at its lowest level historically for this date. Information from the South Africa's Department of Water and Sanitation as of 8 April indicates that aggregated nationally, dams are at 85% of full supply capacity, with levels of individual provinces ranging from 58% to 97%. Lesotho dam levels were reported at 94% full and Eswatini major dams are at 100% full. In Namibia, dam levels aggregated nationally as of 18 March stood at 55%, although only 2 out of 15 dams were at above 50% of full supply capacity, and 7 of these at under 10% full. Many rivers are reported to have dried up, and dam and borehole levels are reported to have dropped, with breakages exacerbating the problem. Zimbabwe's national water authority reported that as of 12 April, levels of major dams in the country ranged from 98% to 3.2%.

Regionally, the current drought situation could be said to be mostly leaning towards other forms of drought (e.g. meteorological drought) as opposed to a hydrological drought. This can be seen in that many of the region's large dams (at least 13 reservoirs of the 18 closely monitored regional dams) were above 90% in capacity, and with a regional dam storage average of 90% by end of April 2024 (see Figure 2 below). Good dam level conditions have been observed in the south-eastern SADC, in transboundary river systems such as the upstream Orange-Senqu, Incomati, Umbeluzi, Maputo River Basins and a few dams in the Limpopo River Basin.

Figure 2: Regional Water Level Situation (Source: SADC, 2024)

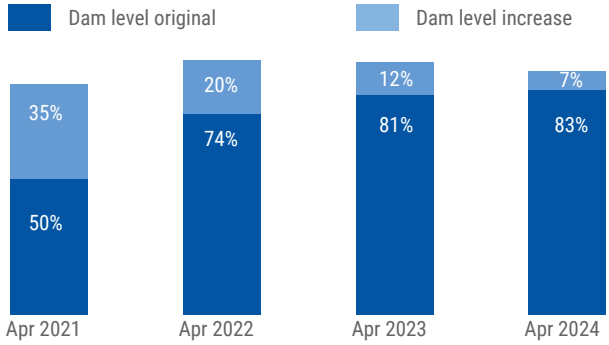


Source: SADC, 2024

However, some parts of the region have experienced heavy El Niño conditions, with a severe hit. While the region's dam level situation may not have been bad overall, serve for the upper Zambezi (Kariba Dam) and a few others, noteworthy is that the 2023/24 hydrological year has witnessed the least dam level rise in the past four years overall. The situation was saved

by that many of the region's dams started the rainy season around October/November at high storage levels (with average regional storage of 83% in November 2023), most likely due to cautious dam operations. Figure 3 below shows the regional dam level increase (average) for the month of April, which reveals that the water collected by the region's dams has been reducing in the four-year period since 2021, with the severity of the situation manifesting in the current year, 2024. It could be expected therefore that even the groundwater recharge has not been particularly good this season for the severely El Nino-hit parts of the SADC Region.

Figure 3: Regional Dam Level Increase



Source: SADC, 2024

b) Existing vulnerabilities

The SADC region is endowed with natural resources, pristine beauty, diverse cultures, multiple languages and a youthful population that drives its vibrant towns, cities and rural communities with cities and metropolises urbanizing at a particularly fast rate. However, the high rate of urbanisation brings with it opportunities for green economic growth and innovation and a strain on service sectors that fail to cope due to unplanned demand.

The region is also categorised as one of the most vulnerable regions to climate change in the world. This vulnerability is largely due to its fragility as a result low adaptative capacities due to poverty, high dependency on rain-fed agriculture and natural resources, climate-sensitive livelihoods and a disease burden that result in livelihood insecurity. Consequently, climate change contributes to climate migration that is driven by the search for opportunities. The region is further characterised by high unemployment and poverty levels, the failure to structurally transform its economies, environmental degradation, high inflation and rising debt levels. These cumulatively undermine the region's socio-economic growth potential.

Frequent exposure to extreme weather events including droughts, floods and tropical cyclones worsen livelihood and food insecurity influences displacement and migration, heightening competition over resources including land and water, and thereby compounding vulnerabilities. A high human, livestock, and crop pest disease burden also emanating from climate change and variability increase the region's vulnerability. Extreme weather events further stress the already vulnerable sectors of the SADC economies such as water, biodiversity, health, tourism, agriculture, fisheries, oceans, mining, extractive industries and human settlements that for the backbone of the region's livelihoods and survival.

Furthermore, climate change also accentuates existing risks, particularly for the most vulnerable groups such as the rural and urban poor, small-scale farmers and internally displaced persons that have little access to alternative livelihoods. The elderly, sick, women, boys and girls are also disproportionately affected due to unequal access to productive assets, such as land and water, and to decision-making processes.

The SADC Regional Vulnerability Assessment and Analysis Programme Synthesis Report for the 2023/24 season estimated that 56.8 million people were food insecure in the region. This figure is expected to significantly increase for the 2024/25 season as Member States finalize their assessments in June 2024. A country level preliminary analysis shows that food insecurity has deteriorated in several countries with a few countries due to a combination of the impacts of the El Nino induced drought, damage from floods, rise in prices and other socio-economic shocks. Previous SADC's regional vulnerability assessment reports have increasingly recognized the interlinkages of climate change and conflict in compounding vulnerability in the region. For example, the 2022 Synthesis Report on the State of Food and Nutrition Security and Vulnerability in Southern Africa notes the role of droughts, tropical cyclones and conflicts in driving displacement and accentuating food insecurity.

The economic shocks from the Covid-19 pandemic including the lockdowns also compounded the region's vulnerability that escalated the levels of poverty, low development, inequality and conflict. The impacts are still being felt to date.

While the SADC region is relatively politically stable and peaceful compared with other regions in the continent, the conflict in the DRC and the ongoing insurgency in Mozambique's Cabo Delgado province further continue to drive displacement and disrupt livelihoods. In 2022 about 1.5 million people were newly displaced in the DRC and over 76,000 in Mozambique.

All these compounding effects increase poverty and vulnerability as communities do not have time to recover and rebuilt their lives.

c) Lessons learnt from previous Regional Appeals

The SADC region has historically been prone to drought, while in recent years the emergence of other hazards such as tropical cyclones has been observed, and the

frequency of their occurrence has increased and severity of impact intensified. In 2016, the SADC region experienced a devastating El Niño induced drought which, at the time, was the worst experienced in 35 years. The 2016 El Niño was coupled with floods, rendering an estimated 40 million people requiring humanitarian assistance. In response to this, SADC Secretariat coordinated the launch of a drought humanitarian appeal seeking US$3.3 billion to support the humanitarian needs of the affected population in some of the Member States. This process galvanized support from all International Cooperating Partners in the region

In March 2019, the SADC region suffered from the worst cyclonic system on record. Tropical Cyclone Idai crippled economies and livelihoods in Malawi, Mozambique and Zimbabwe which prompted the SADC Secretariat to support the resource mobilization efforts for the affected Member States through the development of the Regional Humanitarian Appeal in Response to Tropical Cyclone IDAI which contributed to the US$204 million raised globally to assist in the response and recovery.

In October 2020, the SADC region launched the Humanitarian Appeal to contain the African Migratory Locust. This regional appeal aimed to raise US$21.2 million, for an emergency locust response and preparedness project in Angola, Botswana, Namibia, Zambia and Zimbabwe.

The various humanitarian appeals that the region has developed, focused-on emergency response activities including lifesaving and early recovery activities. In most instances, Member States would be forced to mount response efforts to disasters while still recovering from the impacts of previous disasters thus resulting in recovery deficits as well as diverted investments from resilience building activities.

The 2024 Regional Appeal for Humanitarian Assistance will also support recovery and resilience building in the region starting with the regional assessment of the impact of El Niño in the region. This assessment will also take a deep dive into underlying vulnerabilities and propose actions that will be undertaken by the region in the short, medium, and long term to build resilience to frequent and yet intensifying shocks and stresses.

While the impacts of the El Niño induced drought are evident even before the start of the 2024/25 lean season which is expected to be an La Niña year, it is crucial for Member States to adopt Anticipatory Action (AA) as an approach to disaster risk management by increasing capacity on this approach; developing multisectoral anticipatory action protocols for major hazards including drought, cyclones, and floods; and integrating the approach into national disaster risk management processes, including using AA to complement critical Disaster Risk Management (DRM) elements such as the national contingency planning processes.

Six-Month Risk Outlook

The main rainfall season typically ends between March and April in most parts of the region, including in the central and southern areas that were significantly affected by the drought. Rainfall typically persists until later in the year in areas close to the eastern coasts of the region, including eastern Madagascar, parts of southern Malawi, eastern Mozambique, eastern and southern South Africa, and eastern Tanzania, as well as the bulk of northern and central DRC where rainfall is typically received throughout the year. The rainfall forecasts issued by SADC Climate Service Centre (CSC) for the April to June period range from below normal in the west, normal-to-above normal in the centre and north-east, and normal-to-below normal in the east and north-west. However, given the dry climate in most of the region, little rainfall is expected, and any deviations from this norm, as forecast in the April-May-June (AMJ) forecast, will be minimal in most areas. Tanzania and Madagascar, which experienced significant flooding this season, and sometimes receive rainfall later into the year, may experience exacerbation of the already wet conditions if significant rainfall occurs.

One other climate-induced risk that needs to be monitored is the occurrence of late season rainfall in areas where harvesting and drying of crops is in progress, as significant rains during this stage can lead to increased post-harvest loss. Above average temperatures are forecast until August/September 2024. This may lead to increased evaporation in surface water bodies that are already at low levels, leading to greater water loss for some areas that have already been significantly affected by drought.

The main agricultural risk over the next 6 months is reduced water availability for human and livestock use, as well as continued deterioration of livestock conditions due to poor pasture and water availability in affected areas. Irrigation for winter crops, particularly winter wheat may also experience challenges particularly in Zambia and Zimbabwe due to reduced energy supply associated with the low levels of the Kariba Dam which produces hydroelectrical energy, as well as reduced water available for irrigation where dams are at low levels.

In the longer term, a La Niña event is forecast for the 2024/2025 season. La Niña is typically associated with above average rainfall in most parts of the region, and this presents an opportunity for some recovery from the drought in terms of increased crop production. However, this opportunity may not be fully utilized if farmers are not able to maximize on planting. Many farmers have experienced massive losses in production due to the severe drought and may have limited capacity to purchase inputs for the coming season. Additionally, seed availability is likely to be reduced in some countries during the 2024/25 season, due to the El Nino drought-induced losses that affected the seed crop this season.

6. Sectoral implications and Recommendations

a) Food Security

An estimated 70% of rural communities in the region rely on smallholder farming for their livelihood. Even in years of good rain, many households' meagre harvests usually deplete 3 to 5 months before the next April harvest, necessitating lean season relief support.

According to the SADC Regional Vulnerability Assessment and Analysis Programme Synthesis Report for the 2023/24 season, an estimated 56.8 million were found to be food insecure during the 2023/24 consumption year. Member States are currently in the process of conducting their annual vulnerability assessment to determine the impacts of the drought on food security and livelihoods in the region. The regional dissemination forum for these assessments is planned for July 2024.

Food and nutrition outcomes for most of the region are in Crisis phase (Integrated Phase Classification (IPC) for

Table 1: The 2023/2024 Food Security Status in the SADC Region

COUNTRY	TOTAL NATIONAL POPULATION 2022	FOOD INSECURE POPULATION 5YR AVG (2018-2022)	FOOD INSECURE POPULATION 2022/2023	FOOD INSECURE POPULATION 2023/2024	FOOD INSECURE POPULATION % CHANGE FROM 5YR AVG (2018/2022)	FOOD INSECURE POPULATION % CHANGE FROM 2022/2023	2024 FOOD INSECURE POPULATION AS % OF TOTAL POPULATION
Angola	33,086,000	1,156,216	850,000				
Botswana	2,446,000	36,326	37,000	36,183	-0.4	-2.2	1.5
Comoros	870,000						
DRC	108,581,000	18,734,097	26,400,000	25,400,000	35.6	-3.8	23.4
Eswatini	1,160,000	263,104	258,800	282,900	7.5	9.3	24.4
Lesotho	2,077,000	422 795	319,429	324,847		1.7	15.6
Madagascar	28,178,000	1,320,305	2,230,000	1,720,000	30.3	-22.9	6.1
Malawi	19,352,000	2,323,427	3,822,502	4,400,000	89.4	15.1	22.7
Mauritius	1,262,000						
Mozambique	31,616,000	1,978,588	3,150,000	3,289,565	66.3	4.4	10.4
Namibia	2,596,000	422,178	389,507	695,000	64.6	78.4	26.8
Seychelles	99,000						
South Africa	60,605,000	12,881,836	14,400,000	13,500,000	4.8	-6.3	22.3
Tanzania	61,741,120	684,111	1,110,784	900,000	31.6	-19.0	1.5
Zambia	19,611,000	1,758,519	1,952,123	2,037,710	15.9	4.4	10.4
Zimbabwe	16,179,000	4,361,277	5,456,337	4,249,378	-2.6	-22.1	26.3
SADC	**389,459,120**	**46,342,779**	**60,376,482**	**56,835,583**	**22.6**	**-5.9**	**14.6**

Source: SADC Member States

food security Phase 3, which means that at least 20% of the households have significant food consumption gaps or are marginally able to meet minimum food needs only with irreversible coping strategies such as liquidating livelihood assets, particularly in areas that recorded a below-average 2023 harvest due to weather shocks or are affected by conflict. Across the region many poor households have depleted their food stocks and face constrained access to income amid high food prices.

Conflict affected countries in the region are also affected by food insecurity, as crisis (IPC Phase 3) outcomes were observed. The security situation in DRC remains volatile following the unexpected resumption of fighting between government forces and M23 rebels in North Kivu since October 2023. The rise in conflict in eastern DRC has led to a deterioration in the security and humanitarian situation. According to the Red Cross, nearly 450,000 people have been newly displaced amid insufficient humanitarian assistance to meet needs. This situation, if not immediately addressed, may lead to an increase in the number of people in Crisis (IPC Phase 3) and Emergency (IPC Phase 4).

Four SADC Member States have declared national drought disasters:

a. **Zambia:** on 29 February 2024, His Excellency, Hakainde Hichilema, President of the Republic of Zambia declared drought as a National Disaster and Emergency as the country experienced the driest agricultural season in more than forty years, resulting diminished surface water levels, crop and pasture production for an estimated 6,552,027 people. A total of 982,765 hectares out of an estimated 2,272,931 hectares of maize planted country wide have been destroyed by the drought resulting in total crop failure. The Government of Zambia through the coordination of the Disaster Mitigation and Management Unit developed a Food Security Drought Response Plan (April 2024) which estimates that 9.8 million people are affected by the drought emergency, and the response needs are US$1.42 Billion, with a funding gap of US $1.37 Billion.

b. **Malawi:** on 24 March 2024, His Excellency, Dr. Lazarus Chakwera, President of the Republic of Malawi declared a State of Disaster in 23 districts of the country hit by a dry spell caused by El Nino. The draft National El Niño Induced prolonged Dry Spells and Floods Response Appeal asserts that 9 million people affected by the drought with the response needs totalling US$447 Million, Five per cent of the resource needs have been met.

c. **Zimbabwe:** on 3 3 April 2024, His Excellency, Dr. E.D Mnangagwa the President of the Republic of Zimbabwe, declared a State of Disaster. During the declaration, the president indicated that the 80% of the country received below normal rainfall and the country would require about USD$2 billion for humanitarian assistance. An appeal for financial and technical support for response to the El Nino induced drought is currently under development.

d. **Madagascar:** on 3 April 2024, His Excellency Andry Rajoelina, President of the Republic of Madagascar declared a National Disaster. This was following the passage of Tropical Cyclone Gamane, that hit the north and northeast of Madagascar on 27 March. It reportedly killed 18 people, injured three and left four people missing. This was against the backdrop of tropical cyclones Alvaro that hit Madagascar in January 2024, while the south of the country was dealing with devastating impacts of drought.

e. **Namibia:** The Government of the Republic of Namibia took a decision to declare a State of National Disaster (Drought) on 06 May 2024. The declaration follows the consideration of the crop assessment, which confirmed, amongst others that the national aggregated cereal production of white maize, sorghum, pearl millet, and wheat for 2024 has decreased by 53%. In addition, a decrease of 69.7% on dam water levels was observed in March 2024. As a result, there is a significant deterioration of household food security in various regions of the country.

f. **Botswana:** A severe arable agricultural drought was declared by His Excellency the President of the Republic of Botswana, Dr Mokgweetsi E.K. Masisi in July 2023 following an extensive drought and household food security assessment. To cushion affected communities a different mitigation measures were put in place from the 1st July 2023 and expected to come to an end on the 30th June 2024 with the view to implement new ones depending on the findings of the 2023/24 assessment. These mitigation measures include, insurance pay out of 40% to rain fed arable farmers who secured loans through the Agricultural Credit Guarantee Scheme (ACGS), 30% Livestock feed subsidy and vaccines for both traditional and non-traditional livestock sectors, 50% subsidy for acaricides and antibiotics for control and treatment of animals with amblyomma (bont tick) and dermatophylosis (Senkoba) in Okavango and North West Districts, grants at 100% for solar electrification of field fences in elephant prone areas, supply of ready-to-use therapeutic foods for children with acute malnutrition, as well as supplementary feeding programme at all Primary Schools and Health Facilities. Botswana was also severely affected by the El Nino induced drought of 2023/24, and the Botswana Vulnerability Assessment Committee is currently finalizing an in-depth assessment of the cumulative impacts of the drought.

More SADC Member States are likely to declare state of disaster once they conclude in-depth assessments on the

impacts of El Nino in June 2024.

Governments in the region are constrained in their ability to support due to significant economic challenges, including public debt burdens and other social priorities such as the response to the cholera outbreaks.

Food Prices

Food cereal balance sheet and vulnerability assessment are ongoing in most Member States to determine the actual food deficits and the population segments in most need. Preliminary indications show that most households in the region particularly in Malawi, Mozambique, Zimbabwe, and Angola will be in immediate need for food assistance due to complete crop failure and in some instances minimum harvest that will not last more than two months (beyond June). Market assessments across the region are already showing higher cereal prices as compared to the same time the previous year and higher than the 5-year average. Cereal prices are anticipated to continue rising as the dry season starts. This will affect food accessibility, especially for both vulnerable rural and urban populations. With an anticipated record low harvest in buffer countries like Zambia and traditional exporting countries such as South Africa recording about 19% decrease in grain supply, the region is expected to secure cereals outside the region. With the current food deficit trajectory, most countries in the region will be sliding into IPC Phase 4 of emergency hence the need to immediately operationalise drought mitigation interventions.

Food inflation is expected to accelerate resulting in lower-than-normal household purchasing power. Poor macroeconomic conditions associated with acceleration in monthly inflation and depreciating exchange rates may exacerbate the protracted food shortages and limit access to other basic non-food items. Headline inflation across the region is expected to accelerate due to higher import prices and elevated production and energy costs. An increase in import demand and a strengthening USD is expected to weaken domestic currencies. Power rationing is expected to drive elevated energy price inflation and high prices of alternative electricity sources, such as gas and firewood. Due to the reduced availability of maize, prices in most reference markets are projected to stabilize briefly during the post-harvest period as is typical, but then increase atypically quickly as market demand increases.

Recommendations:

1. Depending on the extent of the cereal deficit in each Member State, there is a need to immediately start mobilizing grain by Member States in partnership with private sector and humanitarian agencies to assist vulnerable Member States.
2. Cash transfer modalities to be developed by Member States in collaboration with development partners to complement in-kind food distribution limiting food distribution logistics in the supply chain and allowing access to a wider consumer basket.
3. Interventions aimed at school feeding to allow uninterrupted learning in the education sector and ensure supplementary nutritious diet amongst children by the donor community.
4. Strengthening and supporting winter food production in areas with irrigation capacity by provision of seeds and irrigation rehabilitation infrastructure to supplement food.
5. Mobilization of agriculture inputs support for the upcoming 2024/25 season through drought-tolerant inputs, water harvesting infrastructure, and irrigation support to ensure immediate recovery and household resilience.

b) Nutrition

The 2024 El Niño event is the worst to hit Southern Africa in the last 40 years, with severe consequences to the communities already facing difficult situations due to failed crops and other microeconomic conditions. The impact is characterized by drought, severe food shortages, limited access to clean water, disease outbreaks and loss of livestock. Recent analysis indicates that staple food prices have increased significantly and are higher than last year's five-year average. The highest food inflation rates in the region stand at 84 per cent in Zimbabwe, 42 per cent in Malawi, and 25 per cent in Angola in March 2024. The El Niño comes when Malawi, Mozambique, Zambia, and Zimbabwe are in the middle of the Cholera outbreak response.

Based on recent estimates, over 3.5 million children are anticipated to suffer from acute malnutrition, including over 600,000 children with severe acute malnutrition/wasting. In some countries, the proportion of children suffering from severe acute malnutrition reached with treatment in 2023 is 10 to 60%, with an average of 48.9% of the carload or acute malnutrition reached. This is compounded by the already existing chronic malnutrition expressed through high levels of stunting, with over 21 million children affected in the SADC region. Based on the trends seen at the last comparable El Niño event of 2016, the effects on child nutrition status will be prolonged and seen mainly during the next lean season, with a peak in the increase in admissions for wasting expected in early 2025. There remains a short window of opportunity to intervene now to prevent any increase in excess mortality due to wasting.

Key response actions

Nutrition must be viewed in a multi-sectoral manner, acknowledging that nutrition vulnerability can be affected through several intertwined mechanisms, and strong government and Inter-agency collaboration and coordination are crucial to allow for joint planning

and programming. This will ensure more effective response, resource mobilization and utilization of funds. To ensure a solid evidence base, continued integration of nutrition in gender-sensitive vulnerability assessment is essential, along with strengthened and integrated monitoring of nutrition indicators through existing national surveillance systems in a multi-sectoral manner. A practical and integrated drought response linking nutrition to food security emergency response is critical. A preventative approach is essential to ensure any further deterioration of the nutrition situation, and resilience efforts will enable more robust communities and individuals during future crises. The nutrition response strategy invests in existing structures and personnel to better manage the nutrition response and integrates a risk-informed programming approach into routine nutrition programmes. The following activities define the recommended nutrition package:

- Strengthen nutrition information systems linking nutrition to livelihood vulnerability assessment and analysis.
- Ensure that emergency food assistance prioritizes pregnant women and girls and young children and is inclusive of nutrition outcomes.
- Ensure that children and pregnant or lactating women are screened for severe and moderate acute malnutrition and referred to treatment facilities when needed for nutritional rehabilitation.
- Protect, promote, and support appropriate infant and young child feeding (IYCF) practices in drought prone areas (facilities and communities).
- Sensitize communities on nutrition key messages and messages.
- Stress the need for robust multi-sectoral collaboration and coordination through clusters and other platforms.

The underpinning condition for a successful response is its focus on strengthening existing systems and community resilience to tackle these drought cycles in Southern Africa.

Key recommendations

We urgently appeal to Governments, the Development Community, the UN, NGOs and Civil Society partners in the nutrition sector to swiftly intervene and safeguard the nutritional status of the most vulnerable by undertaking the following actions.

- Prioritize nutrition interventions to prevent and treat malnutrition among children and women affected by El Niño-related food insecurity.
- Enhance early warning systems and preparedness measures to anticipate and mitigate the impacts of El Niño events on nutrition and child well-being. This includes investing in improved data collection, monitoring, and analysis to identify at-risk populations and target interventions.
- Ensure adequate resourcing for scaling up key nutrition actions. A key focus will be mobilizing resources and expertise to provide immediate assistance to communities affected by El Niño-induced weather extremes and advocating for increased attention and resources to address the underlying drivers of vulnerability to El Niño and climate-related disasters.
- Support efforts to strengthen the resilience of communities in El Niño-prone regions to withstand and recover from the impacts of climate variability and extremes. As part of the humanitarian-development nexus, incorporate El Niño and climate variability considerations into long-term development planning and programming to build adaptive capacity and resilience in vulnerable communities.
- Ensure food systems support access to affordable, nutritious food for the most vulnerable women and children.

Table 2. Nutrition requirements

COUNTRY	NUTRITION PIN	GAM	SAM
Angola	1,302,509	967,036	177,000
Comoros	40,312	25,422	
Eswatini	1,442		
Lesotho			
Madagascar	455,781	358,632	97,149
Malawi	213,259	151,192	62,067
Mozambique	496,989	400,284	96,705
Namibia	36,900	6,000	4,809
Zambia	532,028	391,513	140,515
Zimbabwe	159,775	140,000	19,775

c) Agriculture and livelihoods

The El Niño effects are having severe consequences on livelihoods across the region and the peak of the current event coincides with the critical time of the region's agricultural season. An estimated 70 per cent of the population in Southern Africa who are dependent on agriculture for subsistence, communities affected by El Niño are projected to have lower harvests and fewer livelihood opportunities exacerbating humanitarian needs.

The region's agricultural sector heavily relies on rainfall for crop production, making it particularly vulnerable to the adverse impacts of El Niño-induced low rainfall seasons. These impacts associated with reduced precipitation and increased temperatures exacerbate drought and heat stress risks, significant challenges for farmers. Widespread crop failure has occurred across central parts of the region, namely Zambia, Malawi, Namibia and Zimbabwe. Maize yields have fallen sharply, threatening food security for millions of households depending on this key staple for a significant share of total calories consumed daily. South Africa's Crop Estimates Committee estimated the country's maize

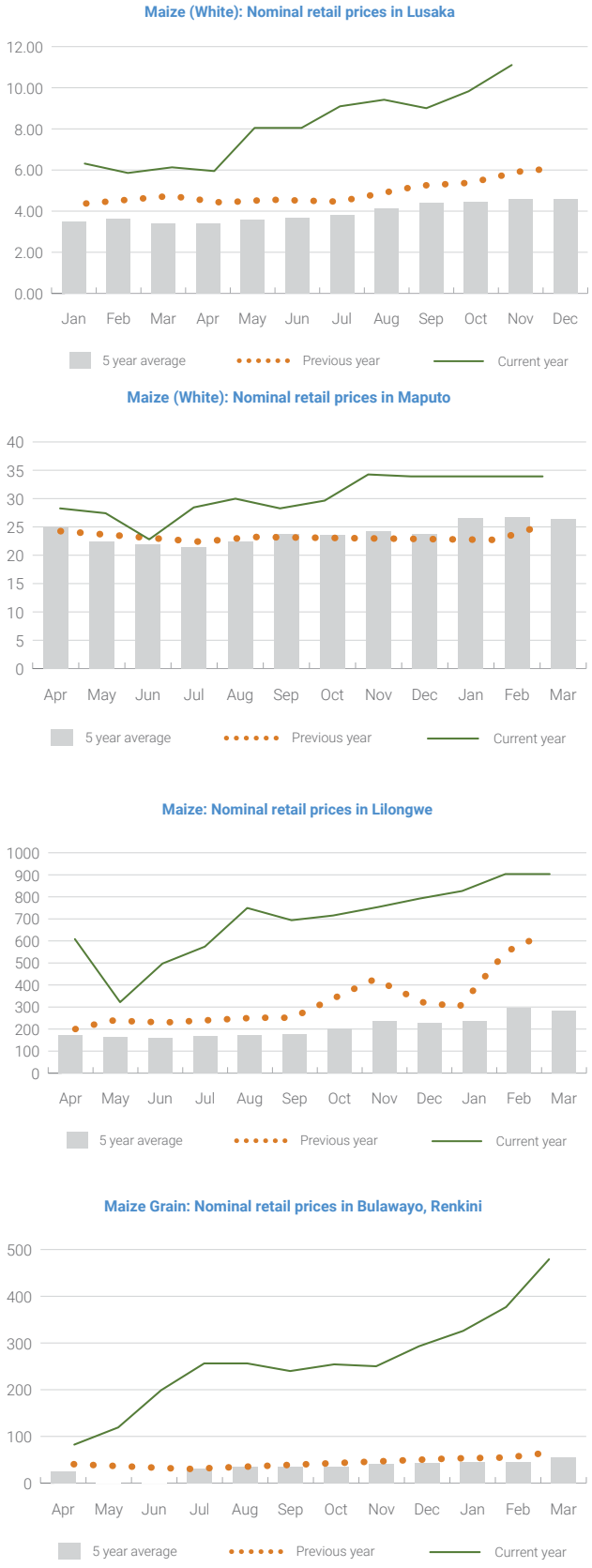
production for 2023/24 to be 13.97 million metric tons (MT), an 18% decline from 2022/23 record bumper crop. Yellow maize production in the country, primarily used for animal consumption, is estimated to decline by 11.9%, while white maize production, primarily used for human consumption, is expected to decline by 24.7%. Preliminary estimates from Namibia's Ministry of Agriculture, Water and Land Reform indicate that cereal production this season is expected at 47% below the 5-year average cereal production. South Africa was also affected by the drought conditions, and their updated crop production estimates released on 25 April includes a revised maize production estimate of 13.97 million metric tons (MT), down 10.2% down from the 5 year average, primarily as a result of the February-March dry conditions. In Zambia, 982,765 hectares of maize, 43% of the planted area, was destroyed by the drought. Zimbabwe crop production figures estimate a cereal harvest of 744,271 MT, representing a drop of 71% from the previous season. These dry conditions have also led to water scarcity, diminished crop yields, and subsequently, food shortages, along with displacement and the proliferation of transboundary crop and livestock diseases such as Fall armyworm. El Niño-linked drought has caused widespread crop damage and wilting in Southern Africa, with 2024 harvests expected at below-average levels. These challenges are expected to escalate food insecurity and malnutrition levels, disrupt education and healthcare services, and exacerbate economic hardships in the region.

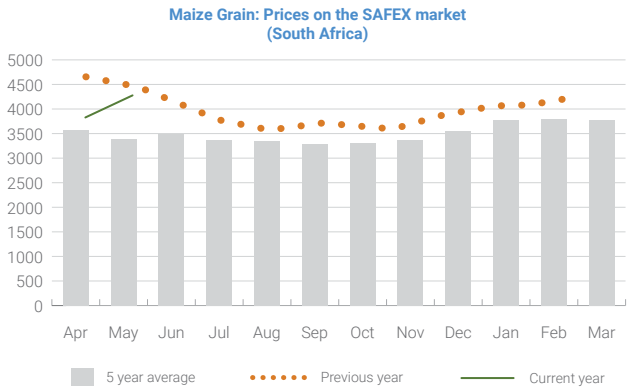
There are concerns about the availability of quality seed for the coming planting season, particularly in countries that have been severely affected by the El Niño-induced drought. The dry conditions reduced seed yields, due to water deficits and temperature extremes. This reduction in seed production will directly impacts the amount of seed available for planting in the next season. Moreover, due to the immediate need for food, many farmers who typically retain seed from harvests for planting in the next season, did not harvest anything, and those who harvested low yields are likely to resort to their seed reserves as a food source rather than setting them aside for future planting. This depletion of seed stocks is compounded by the financial hardship of purchasing new seeds given little to no income from this season's harvests, which may not even be of adequate quality due to the stresses of the drought.

The challenges of seed availability will also likely be influenced by transboundary seed movement. The SADC Harmonized Seed Regulatory System aims to facilitate the trade of seeds across member states to ensure seed availability and diversity, which is crucial under the current circumstances. However, with the widespread impact of the drought, the demand for quality seeds might outstrip the supply, even with facilitated movement.

The problem of low harvests is compounded by post-harvest losses. Estimates indicate that post-harvest losses in sub-Saharan Africa ranged from 15 to 18% in 2022. These losses will exacerbate the limited harvests that are already expected from the 2023-24 drought-affected season.

Figure 4. Maize price trends in selected markets





Regional Cereal Balance

According to a preliminary FEWSNET [1] cereal balance analysis, supplies from the 2024 cereal harvest are expected to be insufficient to cover regional requirements for Marketing Year (MY) 2024/25. Apart from Tanzania and Madagascar, all countries in the region will have below average staple production. Evidence of domestic maize deficits and thin market supplies have been reflected in prices in Zambia, Zimbabwe, and Malawi. Reference maize market prices across Zambia and Zimbabwe in March 2024 were at least 25 percent above their respective March 2023 levels.

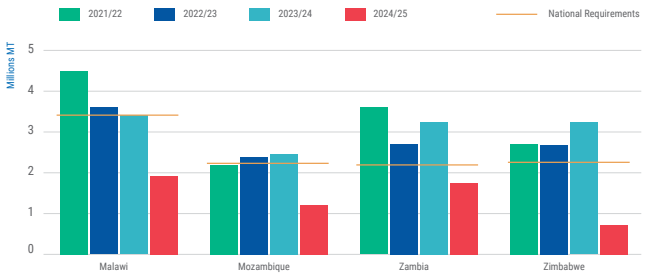
While intra-regional trade will help to alleviate maize deficits in SADC, it will not meet overall regional needs; an estimated 5 million tons of imported maize will be necessary to meet regional demand. Imports will likely remain below the six million-plus tons imported following the strong El Niño in 2015/16.

Opening stocks for MY 2024/25 will be around 14 percent below average due to strong import demand in MY 2023/24, driving tight regional supplies.

The effects of El Niño on crop agriculture in Southern Africa are severe and multifaceted. From crop failure and reduced yields to drought, floods, extreme temperature, and increased pest and disease pressure, farmers in the region face numerous challenges that threaten their livelihoods and food security.

Moreover, drought and water scarcity has exacerbated the situation further, as crops suffer from lack of irrigation and moisture. This not only affects crop yields but also leads to livestock losses and reduced food availability for communities. Regarding crop harvests, significant below-average harvests are expected across the region, which is expected to negatively impact food access, harvesting llabor, and crop sales through the post-harvest period. This is expected to impact livestock body conditions and prices negatively. Poor water availability is also expected to affect some livelihoods negatively, and less income from activities such as vegetable production, brick making, construction, and other coping strategies in the post-harvest period. On the other hand, heavy rainfall and flooding in other parts of the region have caused crop damage and landslides, destroying crops and farmlands. Farmers have been left devastated, with their hard work washed away in a matter of hours. Furthermore, changes in temperature and precipitation patterns due to El Niño alter growing seasons and crop suitability. Traditional farming practices and crop selection become unreliable as the climate becomes more unpredictable. Farmers struggle to sow their seeds in time, resulting in poor germination and stunted crop growth. They struggle to adapt to these changes, leading to crop failures and food insecurity. Additionally, increased pest and disease pressure due to the warmer and wetter conditions result in poor crop health and diminished yields. Pests such as Fall armyworm thrive in these conditions, decimating crops and further adding to the challenges faced by farmers.

Figure 5: Estimated April 2024 Maize Harvest (remote sensing)



Source: FEWS NET, IAPRI, WFP Estimates based on SAGIS, SADC, FAO/GIEWS, and Ministry of Agriculture data.

Livestock

The ongoing effects of El Niño on livestock in Southern Africa are complex and detrimental, with consequences ranging from livestock deaths and loss of income to increased disease outbreaks and disruptions in grazing patterns. One of the primary effects is the reported drying of water points for livestock and poor pasture establishment, leading to livestock deaths and loss of income for livestock rearing households. Typically, drier parts of the region have been the most affected, with water and pasture availability likely to decline earlier than normal during the upcoming dry season in the winter months. During El Niño events, reduced rainfall and drought conditions result in diminished water sources and limited availability of nutritious forage for livestock. This lack of water and pasture leads to dehydration and malnutrition among animals, resulting in livestock deaths and decreased productivity.[2] In Zimbabwe, a total of 9,941 drought-related cattle deaths were reported at the beginning of the season; 47% of the country's wards are expected to face critical grazing shortages from July 2024, while 76% are expected to face challenges in drinking water for livestock. In Malawi, although official February estimates registered a 3% and 6% population growth for cattle and livestock respectively,

drought-related reductions in pasture and water availability, as well as increased livestock disease incidence are expected in the next few months. In Zambia, the drought has reduced pasture for livestock. Provinces in Zambia affected by the drought are host to 76% of the country's livestock. These losses are not only impacting the livelihoods of livestock farmers but also contributing to food insecurity and economic hardships in the region. Additionally, El Niño-induced drought and poor pasture conditions can trigger the movement of people, livestock, and wildlife in search of water and grazing resources, leading to increased competition and conflicts over limited resources. This movement of people and their livestock can also contribute to the spread of transboundary livestock diseases, including zoonotic diseases such as anthrax. Studies have shown that during El Niño events, there is an increased risk of disease outbreaks among livestock due to the movement of animals and the stress of inadequate food and water supplies. Furthermore, El Niño has been documented to cause significant shifts in pasture and rangeland productivity in Southern Africa, impacting livestock grazing patterns and feed sources. Changes in precipitation patterns and temperature regimes alter the availability and quality of forage, affecting the health and productivity of livestock herds. Livestock farmers are forced to adapt to these changes by adjusting their herd management practices and seeking alternative feed sources, further straining their already vulnerable livelihoods.

In order to address the challenges faced by these sectors during El Niño events, early recovery, humanitarian and resilience building efforts are essential.

Recommendations

Crop production:

- Provide drought-tolerant seed varieties and climate-resilient farming practices to farmers to mitigate the effects of water scarcity and extreme temperatures.
- Scale up resilience-building measures enabling farmers to prepare adequately for the next agricultural season starting in September 2024,
- Establish emergency grants or subsidies specifically for purchasing seeds and fertilizer for the coming season, especially for those farmers who have been severely affected by the El Niño drought and suffered significant losses.
- Assess the availability of seeds from local and regional certified sources for the next planting season. Based on this assessment, hasten the procurement of locally relevant seeds from international markets if necessary, including undertaking rapid certification processes to ensure timely distribution.
- Provide training and resources to farmers in less severely affected areas on effective post-harvest grain storage techniques and distribute grain protectants to help preserve the quality and longevity of harvested grain.
- Support water harvesting and off- season cropping built on smallholder access to solar powered irrigation to increase productivity and scale of production
- Maintain and upgrade irrigation facilities to guarantee functional irrigation systems, to help increase food production and availability during the off-peak season.

Livestock production:

- Provide veterinary support and vaccination programmes to prevent livestock disease outbreaks.
- Provide access to emergency livestock feed and water resources for small-medium livestock farming communities facing drought conditions.
- Protect livestock through increased disease surveillance livestock destocking and re-stocking, introduce diversification of livestock production systems, increasing focus on small livestock and promote climate-smart animal husbandry practices to enhance resilience to future climate variability.

d) Fisheries, Aquaculture & Wildlife

Depleted water sources and disruptions in the feeding habitats has already witnessed increased movements of wildlife in the region. The changes in the eco-system and vegetation establishment could precipitate increased outbreaks of livestock diseases as the animals have to graze close to the ground and easily pick spores from the soil such as those for the zoonotic disease anthrax. The changes in the interface between wildlife, people and domestic animals could increase both the transboundary disease outbreaks and also trigger more human-wildlife conflicts.

The ongoing El Niño-induced drought conditions are having a profound impact on fisheries and aquaculture-dependent livelihoods in Southern Africa, affecting both inland and coastal communities. The effects are far-reaching, with consequences for food security, economic development, and the well-being of thousands of people across the region.

Inland, the Zambezi River Basin, which spans across six Southern African countries, is experiencing reduced water levels[3] and altered fish migration patterns due to El Niño-induced drought. This has resulted in decreased fish catches and reduced incomes for small-scale fishers and fishing communities. For example, in Zambia, the Zambezi River's reduced water levels have led to a decline in fish catches, affecting the livelihoods of over 10,000 fishers and their families [4]. Coastally, the effects of El Niño are equally devastating. In South Africa, the warming ocean

temperatures have led to a decline in sardine and anchovy populations, crucial for the country's fishing industry. This has resulted in reduced catches and economic losses for commercial fishing companies and small-scale fishers alike. In Mozambique, the El Niño-induced flooding has damaged aquaculture farms, leading to significant economic losses for farmers and reduced fish supplies for local markets. The flooding has also contaminated water sources, leading to increased cases of waterborne diseases among coastal communities. Furthermore, the effects of El Niño on fisheries and aquaculture-dependent livelihoods in Southern Africa have social and food security implications. Fish is a vital source of protein for many coastal and inland communities, and reduced access to this resource can exacerbate food insecurity and malnutrition. For example, in Malawi, the reduced fish catches in Lake Malawi have led to increased food insecurity among fishing communities, with many households resorting to less nutritious food sources.

Recommendations

Fisheries

- Enhance monitoring and surveillance of fish stocks to assess the impacts of El Niño events on marine ecosystems and fisheries resources.
- Implement sustainable fishing practices and close monitoring of fishing activities to prevent overexploitation of fish populations during and after El Niño events.
- Strengthen aquaculture regulations and management practices to ensure the sustainable production of fish and other aquatic resources.

Aquaculture

- Support fish destocking and restocking
- Promote climate-resilient aquaculture systems, such as integrated aquaculture-agriculture models and recirculating aquaculture systems, to withstand the impacts of El Niño events.
- Provide technical assistance and capacity-building programmes to improve disease management and biosecurity measures in aquaculture facilities.
- Facilitate access to finance and credit for small-scale fish farmers to invest in resilient infrastructure and climate-adaptive practices in aquaculture production.

Scaling up early recovery and humanitarian efforts is crucial in mitigating the impacts of El Niño conditions on agriculture and livelihoods in Southern Africa. By implementing targeted interventions and support mechanisms for agriculture crops, livestock, fisheries, and aquaculture, communities will be supported to build their resilience and adapt to the challenges posed by extreme weather events. Collaboration among stakeholders, including government agencies, non-governmental organizations, research institutions, and the private sector, is essential in implementing these recommendations and supporting the sustainable development of these sectors in the face of climate variability and change.

e) Water, Sanitation, and Hygiene (WASH)

The implications of El Niño on the Water, Sanitation, and Hygiene (WASH) sector in the SADC region are multifaceted. The critical drought conditions have resulted shortages of water for drinking, hygiene, and sanitation (WASH). It is expected that acute water shortages will impact rural and urban communities' access to water and sanitation in the severely drought-struck areas. Limited water availability for sanitation and hygiene would also expose the region to some disease epidemics. This should be a concern considering that the SADC region has experienced recurring cholera incidences, and is recovering from a major cholera outbreak which affected 8 countries in the region. El Niño-induced droughts and erratic rainfall patterns have exacerbated existing challenges related to access to clean water, sanitation facilities, and hygiene practices. Here are some specific implications:

Water Scarcity: El Niño conditions often result in below-average rainfall, leading to decreased water availability in rivers, lakes, and groundwater sources. This exacerbates water scarcity, particularly in rural areas where many communities rely on untreated surface water for drinking and domestic use.

Deterioration of Water Quality: Reduced water availability can lead to the concentration of contaminants in water sources, including pollutants from agricultural runoff and increased microbial contamination due to stagnant water. This deterioration in water quality poses significant health risks, particularly for communities without access to safe drinking water infrastructure.

Impact on Sanitation Infrastructure: Drought conditions can strain sanitation infrastructure, particularly in urban areas where water scarcity affects the operation of sewage treatment plants and the provision of adequate sanitation services. This can lead to the contamination of water sources and the spread of waterborne diseases.

Hygiene Challenges: Water scarcity and deteriorating sanitation conditions exacerbate hygiene challenges, making it difficult for communities to maintain adequate hygiene practices. The lack of water for handwashing and cleaning contributes to the spread of diseases such as diarrheal infections, cholera, and other waterborne illnesses.

Displacement and Migration: In severe cases, prolonged droughts and water scarcity can lead to population displacement and migration as communities seek alternative sources of water and livelihood opportunities. This can strain existing infrastructure and services in host communities, further exacerbating WASH-related challenges.

Impact on Vulnerable Populations: Vulnerable populations,

including women, children, the elderly, and people with disabilities, are disproportionately affected by the impacts of El Niño on the WASH sector. They may face increased difficulty accessing water, sanitation facilities, and hygiene resources, further exacerbating inequalities.

Economic Burden: The economic burden of addressing WASH-related challenges during El Niño events can be significant for governments, communities, and humanitarian organizations. Emergency response efforts, infrastructure repair and maintenance, and healthcare costs all contribute to the economic strain.

Recommendations:

i. Emergency Relief Measures

- Increase development and use of groundwater resources for immediate use; and
- For urban/peri-urban areas, consider use of emergency water trucking as a temporary and short-term measure, while a more stable and reliable water source is identified.

ii. Medium-to-Long -Term Measures

Diversification of Water Sources: Encourage the diversification of water sources, including wastewater re-use, storm water and rainwater harvesting, groundwater recharge, and the development of small-scale water supply systems. This reduces reliance on surface water sources which vulnerable to droughts and enhances resilience to climate variability. Increasing use of green infrastructural solutions, e.g., application of ecosystem-based approaches to drought risk management and nature-based solutions including ecosystem-based adaptation (EbA), should also be promoted.

Promotion of Water-Efficient Technologies: Advocate for the adoption of water-efficient technologies and practices in agriculture, industry, and households to optimize water use and minimize wastage. This includes drip irrigation systems, water-saving appliances, and efficient water management practices. Also undertake timely and regular maintenance and/or rehabilitation of installed water technological solutions as well as infrastructure, including bulk water supply and reticulation/distribution systems.

Investment in Sanitation Solutions: Prioritize investment in sanitation solutions that are resilient to water scarcity, such as dry sanitation technologies and decentralized wastewater treatment systems. These solutions minimize water usage, reduce environmental pollution, and improve public health outcomes.

Hygiene Promotion and Education: Strengthen hygiene promotion and education programmes to raise awareness on the importance of handwashing, safe sanitation practices, and water conservation during periods of water scarcity. Empower communities with knowledge and skills to maintain good hygiene practices even in challenging conditions.

Integration of WASH into Disaster Preparedness: Integrate WASH considerations into disaster preparedness and response plans to ensure a coordinated and timely response to El Niño-induced emergencies. This includes pre-positioning emergency water and sanitation supplies, establishing early warning systems for waterborne diseases, and training local responders in WASH interventions.

Community Engagement and Participation: Foster community engagement and participation in decision-making processes related to water resource management, sanitation planning, and hygiene promotion. Empower communities to identify their own needs, priorities, and solutions, ensuring sustainability and ownership of WASH interventions.

Cross-Sectoral Collaboration: Strengthen collaboration between the WASH sector and other sectors such as agriculture, health, and climate resilience to address the multifaceted impacts of El Niño. By leveraging synergies and sharing resources, integrated approaches can be developed to build resilience and enhance the well-being of communities in the SADC region.

Addressing the implications of El Niño on the WASH sector in the SADC region requires coordinated efforts to improve water resource management, strengthen sanitation infrastructure, promote hygiene education and behavior change, and build resilience to climate-related shocks. This includes investing in climate-resilient water supply systems, expanding access to sanitation facilities, integrating WASH considerations into disaster risk reduction and climate adaptation strategies, and fostering partnerships between governments, civil society organizations, and the private sector. By prioritizing these interventions, partners can work towards ensuring access to safe water, sanitation, and hygiene for all communities in the SADC region, even in the face of climate variability and extreme weather events like El Niño.

f) Energy

Water flows in the Zambezi River are less than a quarter compared to the same time last year. According to the Zambezi River Authority, water levels at Lake Kariba have plunged to 13.5 percent of usable storage by April 8, compared to 21.9 percent one year earlier. Lake Kariba's decreased inflows this season are due to the El Niño. This will undermine hydroelectric power generation and worsen the electricity supply deficit in 2024. Zambia and Zimbabwe rely on hydropower for about 83 percent of their electricity supplies. In March, Zambia started eight hour-long load shedding daily, while Zimbabwe increased the severity of its rolling blackouts to more than 12 hours a day. Most domestic economies will continue implementing power rationing throughout 2024 due to insufficient water supply for hydropower generation and maintenance issues at gas-fired power plants. However, the Shire River basin in Malawi is expected to have high flows because of the controlled water flow release. These constraints on power supply will put increased financial pressure on regional economies as productive sectors are disrupted and power importation becomes necessary. Additionally, increased production costs and reduced power availability for irrigation and processing will put further upward pressure on prices and negatively impact winter season production.

Security and supply of sustainable, adequate, reliable and affordable energy is one of the enablers for industrialization in the SADC region. The development, financing and operationalization of resilient power generation infrastructure is therefore a key enabler in sustaining the long-term success of SADC industrialization. Investment in power generation infrastructure plays a nascent role, by securing long term adequate security of energy supply, allows the downstream value chain beneficiaries to also invest their capital with certainty. The delayed development of regional power generation projects in the recent years has led to huge power generation deficit since 2008.

The regional power generation mix is dominated by thermal power plants predominantly based in South Africa and Botswana. On the other hand, due to uneven distribution of hydrological and renewable energy sources in the SADC region, Member States such as Angola, DRC, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, United Republic of Tanzania, Zambia and Zimbabwe rely heavily on hydropower generation from the major rivers and lakes passing through and along their borders. The ongoing drought and El Nino effects experienced in the SADC region in 2023/ 2024 has negatively affected power generation due to low levels of water in the rivers and hydropower dams in Member States mentioned above.

Due to the prevailing drought and El Nino effects experienced in the SADC region in last quarter of 2023 and first quarter of 2024, the SADC region is operating with power generation deficit of more than 10 Gigawatts, (GW) and as a result all Member States except Angola and Mozambique are forced to implement unfavourable load shedding programmes to manage power supply and demand at national level. This deficit was only around 3.5GW in 2023. This has also been exacerbated by the fact that:

i. several power generation plants in the region are ageing and unable to keep up with the growing energy demand; and

ii. existing transmission interconnectors are inadequate to fully facilitate energy trading among SADC Member States.

The prevailing drought has put pressure on the planned hydropower projects that are about to be commissioned such as the Julius Nyerere Hydropower Station in the United Republic of Tanzania. It has also put pressure on planning, designs as well as investment and bankability of projects that are in preparation phases such as Mpanda Nkuwa Hydropower project in Mozambique, Batoka Hydropower project between Zambia and Zimbabwe, Luapula Hydropower between Zambia and the Democratic Republic of Congo and the Inga Phase 3 Hydropower Project (component of the Grand Inga) in the Democratic Republic of Congo.

The aging infrastructure and inadequate interconnectors combined with the prevailing effects of the El Nino induced drought add pressure to the already unreliable power supply that is unable to meet the demand.

Recommendations

- Support small domestic and light industrial users with renewable power energy such as solar.
- Reconsider approaches of variable geometry and principles of competitive advantages in the development of energy projects to optimize harnessing energy resources that are abundant, while promoting intra-regional power trading and regional integration. For Example, Angola, DRC, Mozambique, Zambia and Zimbabwe should enhance hydropower projects while Botswana and Namibia should promote solar power plants. Similarly, Mozambique and United Republic of Tanzania should invest in gas-to-power projects while South Africa and Botswana should invest in clean coal technology for power production.
- Renovate and/or replace the aging energy generation infrastructure to enable them to match with the growing energy demand.
- Extend transmission interconnectors to facilitate energy trading between SADC Member States
- Diversify the energy supply system to include clean coal and renewable technologies; and
- Develop climate-resilient energy infrastructure will be critical in addressing some of the energy challenges.

g) Health and HIV

Southern Africa is grappling with one of the world's most severe cholera outbreaks, with approximately 234,000 cases and 4,200 deaths reported across eight countries since January 2022. Zambia and Zimbabwe, in particular, have been hard-hit, with 20,700 and 27,000 cases respectively

The health sector is facing escalating challenges, including rising malnutrition rates and heat-related illnesses. The challenges brought on by drought may increase the risk of HIV and AIDS transmission, mental health issues, and gender-based violence, all of which underscore the urgent need for enhanced preparedness and response mechanisms.

The combined effects of El Niño, cholera outbreaks, conflicts, and climate change have burdened and disrupted health systems across Southern Africa, significantly impeding access to essential and lifesaving sexual and reproductive health services.

The climate crisis and cholera outbreaks are also linked to higher rates of miscarriage, preterm births, and poorer neonatal outcomes to vital sexual and reproductive health (SRH) services for women, girls, adolescents, and young people. Extreme weather events have compromised health facilities and medical supply chains, limiting access to skilled birth attendants, emergency obstetric care, contraception, and safe abortion services. This has led to an increase in maternal mortality and morbidity, sexually transmitted infections, and early and unintended pregnancies. Extreme temperatures influence the spread of vector-borne diseases like malaria, which can result in maternal illness and low birth weight.

The combination of El Niño's multiple effects – droughts, floods, food insecurity, disease, economic impact - are negatively affecting the Southern Africa region which is the global epicenter of the

AIDS epidemic. In 2022, eight countries – Botswana, Lesotho, Mozambique, Namibia, South Africa, Eswatini, Zambia and Zimbabwe – had adult HIV prevalence of over 10% (AIDSinfo 2023). The region accounts for almost one-third of all people living with HIV worldwide, and gaps in HIV testing, treatment and adherence, as well as the high rate of HIV-TB co-morbidity, compound the situation.

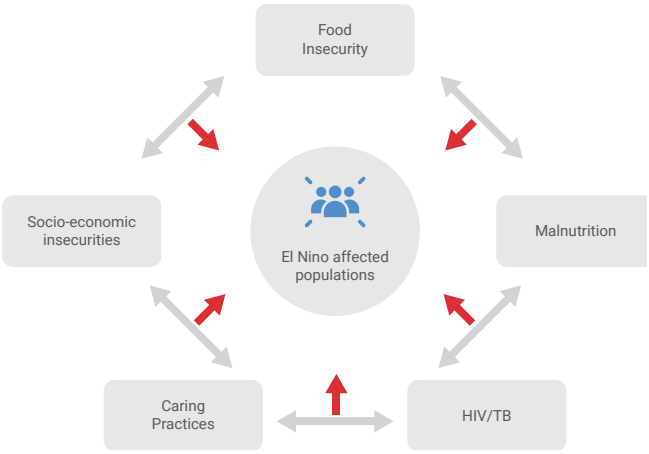
The primary impact of humanitarian emergencies such as El Nino-induced drought on HIV is the displacement and disruption of HIV treatment and access to services including Prevention of Mother-to-Child Transmission (PMTCT) for pregnant and lactating mothers; increased food insecurity among displaced people living with HIV, further threatening treatment adherence; and increased sexual transmission due to income insecurity, sexual exploitation and hunger.

Humanitarian emergencies often disproportionately impact the most vulnerable, including children, adolescent girls and young women. Key populations and other marginalized groups including prisoners and people with disabilities are often less able to cope with emergency-related shocks.

Food insecurity coupled with high food prices in the region and an overall economic downturn in many countries add another layer of complexity to an already strained situation. These added stresses can force families, especially adolescent girls and young women, to adopt unsustainable or harmful coping strategies such as transactional sex, which increases vulnerability to the HIV infection. Young girls, who are affected by HIV (defined as either having lost one or both parents to HIV/AIDS or residing with an adult caregiver chronically ill due to HIV/AIDS) are at particularly high risk of living in food insecure and impoverished households and exhibiting high sexual risk-taking behaviour.

Numerous studies have shown increases in riskier sexual behavior to combat food insecurity: for example, in Lesotho, HIV prevalence rose by 11% in rural females following an El Niño-linked drought event of 2015-16 [5], while severe food insecurity – another fallout from the climate crisis – has been associated with a two-fold increase in HIV transmission among women [6]. Further, a 2014 study of 18 El Niño affected countries in sub-Saharan Africa, including Lesotho, Malawi, Mozambique, Eswatini, Zambia, and Zimbabwe found that infection rates in HIV endemic rural areas increased by 11% for every recent drought. A 2014 Eswatini study, found that food insecure women were 70 % more likely to have unprotected transactional sex than food secure women [7] Moreover, there is growing evidence that links food security and good nutrition with a) an increase in health seeking behavior, b) adherence to HIV and TB treatment, c) reduction in morbidity, d) prevention of transmission among adolescent girls and e) reduction in mortality among people living with HIV/AIDS[8].

Figure 6. *Vicious cycle: Interlinkages between HIV/TB, El Niño-related food and economic insecurity and malnutrition*[9]



There is a strong correlation between food insecurity and HIV treatment adherence, retention and success. PLHIV who initiate treatment while severely malnourished are two to six times more likely to die in the first six months of treatment than those who are not malnourished when they initiate treatment. Additionally, PLHIV often have reduced appetites, are less able to absorb nutrients and often have reduced access to food due to morbidity. Therefore, food and nutrition support programmes are pivotal for PLHIV to stay on and adhere to ART treatment and achieve viral suppression.

Unless urgent steps are taken to ensure that the El Nino- induced drought emergency response is both HIV specific and HIV sensitive, the impact has the potential to reverse the impressive developmental gains that have been made through many decades of HIV prevention and treatment in the region. To date, humanitarian response plans often overlook the bidirectional linkages between HIV and food insecurity and yet there is a need for urgent investments in HIV to be made to safeguard the remarkable achievements in the HIV response within this region.

h) Protection Gender and GBV

Climate shocks disproportionately impact on women and girls, particularly in rural areas where they are more dependent on natural resources for their livelihoods. The protection risks for women, boys and girls are escalating due to a variety of hazards, including El Niño impact and cholera outbreaks. Increased displacement, breakdowns in family and community support systems, child separation, and the escalation of negative coping strategies contribute to growing protection, child protection, GBV, mental health and psychological risks for affected populations. Extreme weather conditions lead to forced displacements, heightening risks of gender-based violence (GBV), child marriages, and trafficking. The need to travel further for water and firewood also increases the likelihood of physical and

sexual violence against women and girls. Economic pressures from disrupted access to natural resources and livelihood sources such as farming can further trigger intimate partner violence. There is a critical need for robust systems to prevent and respond to GBV, which should include medical care, mental health and psychosocial support (MHPSS), case management, and supplies for clinical management of rape.

Incidences of Sexual Gender Based Violence (with its associated risk of HIV transmission and early and unintended pregnancy) can also increase with drought and food and water scarcity. In many communities, women and girls are the main caregivers in the family. Women as family caretakers may have to trek long distances to remote locations to collect water for household use, and this may expose them to sexual harassment, violence and rape. Food scarcity may inherently lead to tensions within the households, thus increasing the likelihood of domestic violence. Women may also suffer reprisal attacks for their participation in food assistance activities by their partners. The Southern Africa region has one of the highest rates of Gender-based violence. It is estimated that 1 in 3 adolescent girls will experience some form of GBV in their lifetime and this situation compounded by emergency situations. Research in Botswana and Eswatini found that women who lack sufficient food are 70% less likely to perceive personal control in sexual relationships, 50% more likely to engage in intergenerational sex, 80% more likely to engage in survival sex, and 70% more likely to have unprotected sex.

Humanitarian crisis such as droughts affect women, men, girls and boys differently, exacerbating pre-existing gender norms and inequalities. It changes social and cultural structures and redefines women and men's statuses in both positive and negative ways. It is therefore imperative for interventions to be planned with gender dynamics in mind, in order for the needs of those under threat to be adequately met.

In order to understand the gendered effects of El Niño on men, women, boys and girls, the resilience exposure and sensitivity matrix is being used, which stipulates that individuals are exposed to different shocks and stressors and experience them differently given different levels of sensitivity. Individuals evaluate and prioritize risks differently according to their perceptions of the severity of the particular shock or stress and its likelihood of occurring. As a result, women and men often prepare for and manage different kinds of risks .

Secondly, people have different resilience capacities. Both men and women are affected, although their vulnerability differs. Men are highly sensitive to livestock losses induced by drought because of the influence of gender norms. Women and girls are highly exposed to Gender Based Violence; child marriage rates are likely to increase as families adopt negative coping strategies. As a result of gendered roles again, women are highly sensitive to food shortages at household level given the role they play in food preparation and family feeding.

Both men and women are highly exposed and sensitive to water scarcity, when there is no surface water for livestock drinking, men bear the arduous task of driving cattle herds over long distances in search of surface water, and in instances where surface water cannot be found, they dig deep open wells in rivers to save their herds of cattle. This reduces the time they spend on other productive roles. Men on the other hand migrate to neighboring countries in search of paid employment putting a strain on family ties. When men migrate women's burden of work further increases as they adopt roles that were previously prescribed to men.

As a result of food shortages at household level, women compromise their health and nutrition status as they often prefer to feed their husbands and children first at their own expense.

Gender directly influences exposure and sensitivity to shocks and stresses like drought and men, women, boys and girls differ in their perceptions of shocks and stresses. Gender influences the resources needed to respond to key shocks and stresses like El Niño-induced drought, and access to and utilization of natural resources is highly gender-sensitive, men often make decisions and control resources of high value, household decision making patterns on income and other assets of high value are often skewed in favour of men, access to early warning and response information is also highly gendered, with men being better positioned compared to women who are often kept within the confines of their kitchens. Acquisition of skills and knowledge necessary to respond to shocks is also influenced by gender, young women are disproportionately affected given their mobility challenges.

A "One-size-fits-all" model of response to El Niño-induced risks inadvertently excluding vulnerable groups, or even increasing marginalization and vulnerability.

Children, especially girls, are often uniquely vulnerable during crises like El Niño-induced drought, which all too often increase risks such as child marriage, trafficking and gender-based violence.

Extreme weather, whether extreme heat or too little rain can also disrupt education, with girls often forced to drop out of school due to reduced family incomes, safety concerns or greater household responsibilities. This not only has long-term consequences on their development and life opportunities, but can place girls at risk of violence, early marriage, teenage pregnancy and hunger.

In times of crisis, girls, particularly in low-income regions such as Southern Africa, are also at greater risk of health issues and malnutrition. They are more likely to be forced to leave their homes, which can lead to exploitation and separation from their families (Plan International 2023).

Male youth are not spared either, as they often adopt negative coping mechanisms such as substance abuse and committing other acts of violence.

Recommendations from a gender perspective

- Layer and integrate multi-sectoral interventions that enhance gender equity (especially women socio-economic empowerment programs) and promote human rights.
- Integrate gender transformative Sexual and Reproductive Health Services for adolescents
- Integrate gender in the efforts to strengthen WASH initiatives with the view of tackling harmful norms and beliefs that view hygiene and sanitation issues as the role of women, leaving men and boys aside.

i) Supply Chain (Logistics & Procurement)

The El Niño-induced drought emergency is affecting the crops and livelihood of a large part of Southern Africa and will push millions of people into food insecurity for the rest of 2024 and beginning of 2025. As per estimates, more than 20 million people in Zimbabwe, Malawi, Zambia, Mozambique, and other countries shall not be able to collect enough food from the farms or to buy it in the markets. It is further estimated that the region shall not be able to cope with the food demands which will have a direct consequence of importing from other regions or continents, associated with higher costs, delays in arrival and anticipated quality problems.

When it comes to international purchase, two factors are of major importance: immediate funding for covering the lead time gap from contracting to food arrival and careful planning of arrival routes, to avoid the congestion in the ports, causing other unnecessary payments to shipping companies and container operators. Central/ Northern Africa and/or Europe/Middle East being the most likely sourcing markets, the food shipments shall be received in the eastern coast ranging from Mombasa, Dar es Salaam, Beira, and Durban. The incoming traffic in these ports must be studied, for preventing conflicting arrivals and spreading the risk. If South America sourcing is to be considered, ports such as Matadi, Luanda, Walvis Bay and others also have to be considered.

Figure 7 shows SADC regional transport corridors with adequate infrastructural and operational capacity to handle the anticipated surge in imports for drought relief humanitarian consignments. Port, road, and railway operations will be coordinated to expedite deliveries and to minimize transport and logistics costs.

Figure 7. *SADC Transport Corridors (Roads, Ports and Border Posts)*

Source: SADC, Member States.

From figure 7 above three country clusters are proposed based on the following factors: number of countries that have declared emergencies; the spatial pattern of affected countries and populations; the configuration of regional transport networks and systems; and the lessons learnt from past drought events: -

Botswana, Lesotho, Eswatini, South Africa and Mozambique Cluster

Supply to this cluster is mainly via South Africa suppliers, incorporating the needs of the smaller adjacent markets into their plans, supplemented by direct government imports and humanitarian assistance. The demand is imported mostly through the port of Durban, Beira and Nacala, with delivery via multi-modal transport networks to logistics hubs in target destinations, i.e. Maseru, Gaborone, Manzini, affected provinces in southern Mozambique.

Malawi, Zambia, and Zimbabwe Cluster

The deficits in Malawi Zambia and Zimbabwe will likely be satisfied through a combination of commercial imports, direct government purchases and perhaps humanitarian assistance, also mainly from abroad. Imports will come through the ports of Dar es Salaam, Durban, Maputo, Beira and Nacala ports depending on end destination and country corridor/port preference. The options include the North-South, Maputo, Limpopo, Beira and Nacala corridors, which can be used to deliver to logistics hubs in Zimbabwe and Malawi.

Angola, Namibia, Mozambique, South Africa, and Tanzania Cluster

Each coastal country can handle its own imports if this is required, providing alternative and or additional capacity for imports to

landlocked affected countries. Deliveries will be via a wide choice of regional multimodal (road /rail) corridors.

Recommendations

The following trade and transport facilitation policy measures must be put in place by all SADC Member States (including those not affected by the drought which might be used as transit) to optimize the regional drought relief transport and logistics operations:

- Introduce special "drought relief cross-border permits" to transport operators who are awarded drought relief tenders, with logos that identify drought relief vehicles / trains, as well as issue special visas and identity documents for drought relief crews (road and rail) involved in cross border operations.
- Introduce expedited customs clearance procedures (including priority to berthing on arrival for drought relief cargo vessels; pre-clearance and special lanes at border posts) for drought relief cargo.
- Harmonize vehicle and drought relief cargo inspection, fumigation, and certification procedures.
- Waive "cabotage" restrictions and suspend the "third country rule" for drought imports / exports.
- Provide security escorts for rail and road convoys and security at logistics hubs where necessary.
- Provide mapping of regional ports, road and railway networks and install cargo tracking and monitoring systems on drought relief vehicles and trains.
- Sensitize all government transport, customs, port, border, police, and security agencies involved in cross border regional trade and transport regulation on the agreed SADC El Niño Logistics and Coordination Team.
- Notification to be made for all government road authorities responsible on vehicle axle load control at the weighbridge stations to waive and suspend all restrictions that may cause delay during shipments of relief consignments for drought imports / exports by road.
- Advance contracting should be applied, to ensure transparency, competition, and visibility of capacity network through comprehensive transport planning and information sharing. It will be good to articulate World Food Programme (WFP), who stands ready to support the governments with expertise in planning, procurement, transport, and storage sectors, being an important actor from international markets to the end beneficiary distribution activity.

j) Human mobility and displacement

El Niño conditions have severely impacted the SADC region, causing extreme drought and heavy rains that trigger riverine and flash floods. These events have displaced thousands across the region. In Malawi, early March 2024 floods displaced over 14,000 people and left an estimated 80,000 in urgent need of humanitarian aid. Madagascar has faced erratic rainfall, leading to drought in the Grand Sud. Simultaneously, Tropical Storm Alvaro and excessive rains caused major flooding, affecting close to 52,000 people, with Tropical Cyclone Gamane later displacing an estimated 22,000. Similar displacement patterns due to heavy rain and flooding are evident across other SADC members states, like Mozambique, Zambia, Angola, and Tanzania.

While displacement resulting from rapid-onset events is readily visible, a significant data gap exists in understanding the mobility trends associated with drought conditions. There are indications of changing trends in population movements associated with food insecurity across the region, including within Zimbabwe. Systematic data collection in both urban and rural areas is crucial for a more comprehensive picture of underlying drivers of vulnerabilities both for persons on the move and host communities.

Furthermore, limited knowledge exists on the extent of food insecurity faced by displaced populations. Northern Mozambique provides a concerning example, where FEWS NET estimates a rapid reemergence of Crisis (IPC3) areas within violence-affected Cabo Delgado. The additional displacement of 120,000 people since December 2023 has severely hampered humanitarian responses. The DRC, confronting one of the world's worst food and displacement crises, has over 25 million people facing crisis or emergency food insecurity. While data isn't specifically disaggregated by displacement status, anecdotal evidence heavily suggests IDPs are among the most vulnerable (IDMC, 2023).

Across the SADC region, IDPs, refugees, and vulnerable migrants are disproportionately affected by ongoing drought and other natural hazards. It is imperative to deepen understanding of the nexus between human mobility and climate hazards, including El Niño-induced drought, to inform appropriate responses, incorporate better early warning systems, and enable anticipatory action.

Recommendations

- **Prioritize Data Collection: Address** data gaps on the link between displacement and climate hazards, with a focus on droughts. Collect data disaggregated by gender, age and disability for granular insights and integrate displaced populations into local, regional, and national disaster preparedness response plans.
- **Enhance Monitoring and Assessment**: Integrate human mobility data (displacement tracking, needs assessments, community perception surveys) into vulnerability and risk assessments for a greater understanding of how food insecurity influences mobility. Use findings to inform tailored responses to the most urgent needs.
- **Mitigate Conflict and Promote Cohesion**: Assess how climatic shocks and environmental degradation intensify conflict risks between displaced populations, migrants, and host communities. Collect relevant data on experiences of discrimination, exclusion, and heightened vulnerability among these groups, including protection risks such as GBV and

trafficking in person. Develop conflict mitigation and social cohesion strategies for affected communities.

- **Strengthen Anticipatory Action**: Forecast the impacts of climate-induced disasters on households and communities as drivers of displacement. Align with the Continental Roadmap on Early Warnings for All to 2027 by integrating mobility indicators for early triggers, ensuring responsiveness to the needs of mobile populations and host communities.
- **Measure and Refine Interventions:** Measure the effects of anticipatory action interventions in sustaining peace and promoting positive dynamics between host and displaced/ migrant communities. Use the results to refine approaches for maximum impact.
- **Foster Cross-Sectoral Collaboration:** Facilitate collaboration between ministries and agencies responsible for climate, environment, food security, health, energy, and development with those addressing human mobility and displacement. Ensure policies, planning, and implementation reflect this integrated approach.
- **Uplift Regional Cooperation**: Building on the Kampala Declaration on Migration, Environment and Climate Change, strengthen regional collaboration on data collection, early warning systems, and response planning efforts to address displacement across borders.

k) Education

The El Niño-induced drought is expected to impact the education environment as follows:

Disruption in School Attendance and academic performance: children may drop out of school or withdraw from school to support the household; the added burden of disease in areas facing food and water insecurity can render children too weak to attend school. It can also reduce the time available for education when the household division of labour is restructured to cope with illness. In any case, ill or malnourished children lack the energy to be active learners. Climate change induced shocks could have adverse impact on academic performance of students in different ways. It causes scarcity of water in schools for safe drinking and sanitation; children tend to miss classes to help their families searching for water; hunger and malnutrition results in inattentiveness in the class; leads for displacement of families and school dropout; loss of assets and livelihoods has compromised the capacity of parents and caregivers to send their children to school as covering costs of uniforms, school materials and food is becoming difficult; heat waves make it difficult to cover curriculum properly; drought-affected children might exhibit behavioural changes such as uncertainty, disturbance, hopelessness, fear and anxiety due to prevailing shortage of food and water as well as lack of rest; it intensifies the prevalence of water/air borne diseases.

Risk of Dropout: climate change related problems adversely affect teaching and learning by causing lateness and absenteeism to school among teachers and students; inconducive learning environment, destruction of means of livelihood; incompletion of curriculum content, ineffective instructional supervision, and poor performance in examinations. Furthermore, research indicates that vulnerable households can withdraw their children from school as part of their coping strategy to deal with shocks to income. A drop in income of households due to climate change impacts is more likely to cause cuts in food expenditure, substituting less nutritious food or consuming less, with profoundly detrimental effects on child development. Similarly, adjustments in consumption could result in a reduction in spending on health care and school related costs. As a result, a shock to incomes often means lower school attendance, poor performance or even dropout. With that, some children, particularly the older ones, would take up paid work to help support the household. Also, there is high probability of dropping out from schools and forced children to take part in domestic activities, unpaid activities and paid labour due to shocks. As compared with boys, girls are often responsible for fetching household supply of water and collecting firewood, and they are forced to travel greater distances as sources become scarcer. As a result, they have less time to spend on schoolwork and leisure, both of which are vital for children's social and intellectual development

Increase in Malnutrition: El Niño conditions are causing shortages of water and food, leading to malnutrition and hunger which would have impacts on school attendance and result in poor performance in academic work. Higher temperatures have been linked with increased rates of malnutrition, cholera, diarrhoea disease and vector-borne diseases such as dengue and malaria. It may also impact school attendance and educational attainment through its effects on children's health and nutritional status.

Displacement of People: Climate change induced disasters could also trigger displacement of people which has serious consequences for children. It fragments families and disrupts social networks; interrupts children's education and may result in leaving the school system altogether. Climate shocks affect human capital accumulation (among the key capitals which enable to improve

resilience of people to climate shocks as well as priority development goals) and it will seriously fall as the risk of disaster increases. In addition, education is critical for promoting sustainable development and improving the capacity of people to address environment and development issues. However, additional stress from global warming will make it more difficult to achieve existing development targets for education.

Recommendations:

- **Maintenance of School Feeding Programmes:** Notwithstanding the potential drought problem, Member States, through support from Development Partners, should ensure that school feeding programmes are maintained and should be undertaken ahead of time or immediately after the occurrence of the drought to overcome the problems related to school dropout.
- **Ensuring Water Supply on school premises:** This would help minimise the impact of El Niño-induced drought.
- **Organisation of Catch-Up/Replacement Classes** - Special tutorial programmes should be arranged for those students who have missed classes due to shocks before seating for final examination.
- **Implementation of child-centred adaptation strategies**: This involves creating easier ways for children to be educated or equipped to deal with the effects faced. One such method is child-led awareness through social media. This involves using children to educate other children about the problems at hand.
- **Inclusion of disaster risk management in school curriculum**: This will help to prepare children for disasters and the appropriate response. This will leave children wiser during a climate crisis and decrease fatalities. Furthermore, small-scale child-led programmes should be considered where children engage in tasks that improve the climate change situation. This can include the planting of trees or learning how to filter water for instances where droughts and disasters strike. Child-centred approaches have proved useful in the past. In other instances, children can disseminate information and stimulate discussion on climate change among their age groups.

I) Early recover and resilience building

The possibility of a La Niña in the 2024/25 summer season is positive for agriculture but strengthens risk of flooding in flood-prone areas.

MADAGASCAR

Women going to work in farms, Amboasary region - MADAGASCAR, January 2024. Photo: UNOCHA/ Viviane RAKOTOARIVONY

7. Regional Response Strategy

SADC's mandate of enabling regional integration and sustainable development is jeopardized by the current El Niño event in the region that threatens to erode the development gains already made. Although three Member States have so far declared a state of emergency, many more countries in the regions are experiencing the strain and will face challenges in agriculture, food security, nutrition, health, energy, WASH for some months to come. Further, the interdependency of the members of the southern Africa region means that response to the El Nino drought has to have a regional coherence, while accounting for the specific needs of the appealing Member States. The response strategy will address immediate life-saving needs of the affected population while creating a foundation for longer term resilience through a focus on the region's chronic needs.

A multi-year plan: The Appeal is for an initial one-year period covering the period up to the end of the 2024/25 agricultural season. However, the overall strategy acknowledges that a sustainable response needs to be linked to medium to longer term development and resilience building, while leveraging on innovations such as Anticipatory Action and Forecast-Based Financing. SADC will link the Member State plans with existing SADC programmes that have medium to long term developmental and resilience building activities and will also advocate for International Cooperating Partners to use the Member State response activities as a basis for longer term developmental and resilience building work.

A multi-sector response: The nature of impacts points toward a far-reaching phenomenon, affecting sectors beyond food security such as WASH, nutrition, health, protection, and energy. Further, there are cross cutting considerations such as gender, youth, and HIV. The regional strategy therefore looks at a wide range of needs anchored on water availability for dependent water access, including agriculture and hydropower generation. Water availability sets the stage for other sectors and programmes to address these needs in line with their respective mandates, for example health, WASH, education, and nutrition outcomes are enabled through water availability. This regional appeal, however, narrows down to the short- and medium-term humanitarian needs, with dimensions for laying a foundation for early recovery and resilience building.

Adapting the humanitarian response to build the Region's resilience to crisis: the plan acknowledges that the Member State responses are done in an environment that already has ongoing development and resilience programs, both micro and macro and seeks to leverage on such programs. By identifying the needs of the different sectors, Member States set a base where the short-term humanitarian needs are addressed and where medium- and longer-term resilience and development programs can take off. This will also ensure that opportunities for macro financing are considered. Further, the growing need to futureproof livelihoods for better resilience means that innovative approaches around micro-and macro insurance for vulnerable populations can be reinforced through this strategy.

SADC has established a regional framework for enhancing emergency response capacities. The SADC Disaster Preparedness and Response Strategy and Action Plan was approved in May 2023. Additionally, the establishment of the SADC Humanitarian Operations Centre (SHOC) provides an opportunity to further the establishment of the Financial and Food Reserve Facility that can be managed under it. Support is required from Member States and partners in the establishment and capitalization of these disaster response mechanisms.

a) Ongoing Response and response capacity

Overall National and Local Response Capacity

Between February and April 2024, Madagascar, Malawi, Zambia, and Zimbabwe have declared states of disaster due to floods and drought that has affected the food and nutrition security and livelihoods of millions of people. The Governments of Malawi and Zambia developed drought response plans and launched humanitarian appeals while these processes are still ongoing in Madagascar and Zimbabwe. These response plans depict the population that has been affected by the drought as well as the response needs by sector.

Coordination mechanisms have been activated and sector platforms or Cluster functions are in place in the affected Member States. Collaboration and coordination with in-countries partners including the United Nations as well as national and international non-governmental organizations is fostered at all levels.

Regional Response Capacity

The SADC Council of Ministers in their meeting held in March 2024 noted with concern the impacts of El Niño on various Member States and directed the Secretariat to convene a joint meeting of Ministers Responsible for Disaster Risk Management, Agriculture, Energy and Water to deliberate on the impacts of El Niño and come up with recommendations for response. A Regional Humanitarian Appeal to respond to the impacts of drought was developed to be launched during the extra-ordinary summit of SADC Heads of State and Government to be held on 20 May 2024. This appeal was developed by the SADC Disaster Risk Reduction in collaboration with the El Nino task force of the Regional Interagency Standing Committee, for Southern Africa (RIASCO). While implementation of the response activities will be at national level, monitoring and coordination capacity at regional level is a gap, that SADC and partners are looking to address.

Table 3. SADC Appeal Summary of Needs, Targets & Requirements

Summary of Needs, Targets & Requirements

61.7M People in Need

56.6M People Targeted for Humanitarian Assistance

$5.5B Funding Required

COUNTRY	YEAR	PEOPLE IN NEED	PEOPLE TARGETED	TOTAL REQUIREMENTS (US$)	AVAILABLE FUNDING (US$)	FUNDING GAP (US$)
ANGOLA	2024	2,240,802	2,240,802	$3,250,000		$3,250,000
BOTSWANA	2024	1,504,900	1,504,900			
DR CONGO	2024	23,410,348	23,410,348	$1,500,000,000		$1,500,000,000
ESWATINI	2024	400,000	400,000	$65,997,539		$65,997,539
LESOTHO	2024	581,000	581,000	$2,250,000		$2,250,000
MADAGASCAR	2024	1,387,831	1,387,831	$108,103,000		$108,103,000
MALAWI	2024	9,000,000	9,000,000	$446,739,294	$2,1,614,497	$425,124,797
MAURITIUS	2024					
MOZAMBIQUE	2024	3,300,000	3,300,000			
NAMIBIA	2024	695,000	695,000	$70,663,576	$42,693,659	$28,169,917
SEYCHELLES	2024					
SOUTH AFRICA	2024					
TANZANIA	2024					
ZAMBIA	2024	9,779,145	6,552,027	$1,424,158,987	$51,158,987	$1,373,000,000
ZIMBABWE	2024	9,400,000	7,500,000	$2,117,141,060	$109,689,995	$2,007,451,065
Total		**61,699,026**	**56,571,908**	**$5,738,303,457**	**$225,164,784**	**$5,513,138,673**

b) Coordination arrangements and cross-border cooperation

The coordination of the regional response will be spearheaded by the SADC Secretariat, through a mandate given by Member States. The coordination of this response will entail the following activities:

a. Analysis and communication of the impacts of El Niño and therefore the financial and logistical needs and requirements for an effective response;

b. Updating the Drought Appeal as necessary.

c. Coordination, from a regional perspective, of the importation and distribution of food and non-food commodities in the SADC Region to mitigate the impacts of the El Niño event;

d. Monitoring the drought impact on people and livelihoods and evaluation of the response to allow for effective decision making during and after the response; and

e. Development of recommendations for future disasters prevention, preparedness and response.

c) Advocacy and public awareness

Under this appeal, key themes will be reinforced for advocacy, including but not limited to the following:

- the need to cover the resource gap to enable adequate coverage of the needs of drought affected persons;
- effective coordination of all governments and partners at all levels;
- investment in addressing root causes;
- Linking the El Niño response to longer term resilience and developmental initiatives already existing in Member States.

d) Response Monitoring

Monitoring: In order to ensure that SADC meets its set objectives of ensuring a well-coordinated Member State response, the El Niño response team will put systems in place to enable the monitoring of the response and hence give stakeholders an opportunity to review and adjust the response in a timely manner that does not compromise on quality assistance to the affected.

The framework: Covering April 2024 to March 2025, the Response Monitoring Framework (RMF) will track achievements against agreed targets for delivery of humanitarian assistance to affected populations. The RMF defines what will be monitored, how and when, identifies responsibilities for monitoring and analysis, and provides a clear schedule for the release of reports, including situational reports and humanitarian dashboards. While providing an evidence base for SADC and its Member States to make decisions on strengthening the humanitarian response, addressing shortcomings, and adjusting the response, the monitoring framework will also strengthen the humanitarian community's accountability towards the affected population

Reporting: Regular monitoring reports will be produced. These monitoring reports will present progress made against agreed targets as set out in the RMF, challenges faced in reaching the set targets, changes in the context, if any, an analysis of funding, and recommendations for the way forward. The situation update and humanitarian dashboard will be used to highlight key responses, needs and gaps. Member States will be encouraged to use the same situational reporting templates to enable easier regional synthesis.

8. ENDNOTE

1 Taken from Southern Africa Regional Supply and Market Outlook Update of 23 April 2024. Link.

2 https://www.unocha.org/publications/report/malawi/humanitarian-impact-el-nino-southern-africa-key-messages-april-2024

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4 https://www.conservezim.com/2024/04/09/fishing-decline-in-southern-africa-due-to-el-nino-induced-drought/

5 Low AJ, Frederix K, McCracken S, Manyau S, Gummerson E, Radin E, et al. (2019) Association between severe drought and HIV prevention and care behaviors in Lesotho: A population-based survey 2016–2017

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7 Fielding-Miller et al. 2014. There is hunger in my community: a qualitative study of food security as a cyclical force in sex work in Eswatini . BMC Public Health, January, 2014.

8 Claros et al. (2014) Adherence to HIV and TB Care and Treatment, the Role of Food Security and Nutrition. AIDS Behavior Journal, October, 2014

9 Inter-Agency Task Team to Address HIV in Humanitarian Emergencies & Inter-Agency Task Team on HIV and Food and Nutrition, 2017

Acknowledgements

About

This document is authored by the SADC Secretariat with contributions from a RIASCO Taskforce dedicated to look into the humanitarian impact of El Nino and the climate crisis in Southern Africa. It was consolidated, compiled, and designed by OCHA Regional Office for Southern & Eastern Africa on behalf of SADC and RIASCO. The appeal draws upon data and information supplied by Member States and humanitarian partners, and it provides a shared understanding of the crisis, including the most pressing humanitarian needs and the estimated number of people who need assistance. It represents a consolidated evidence base and helps inform joint strategic response planning.

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