

# Southern Africa Seasonal Monitor

WFP Regional Bureau Johannesburg



World Food  
Programme

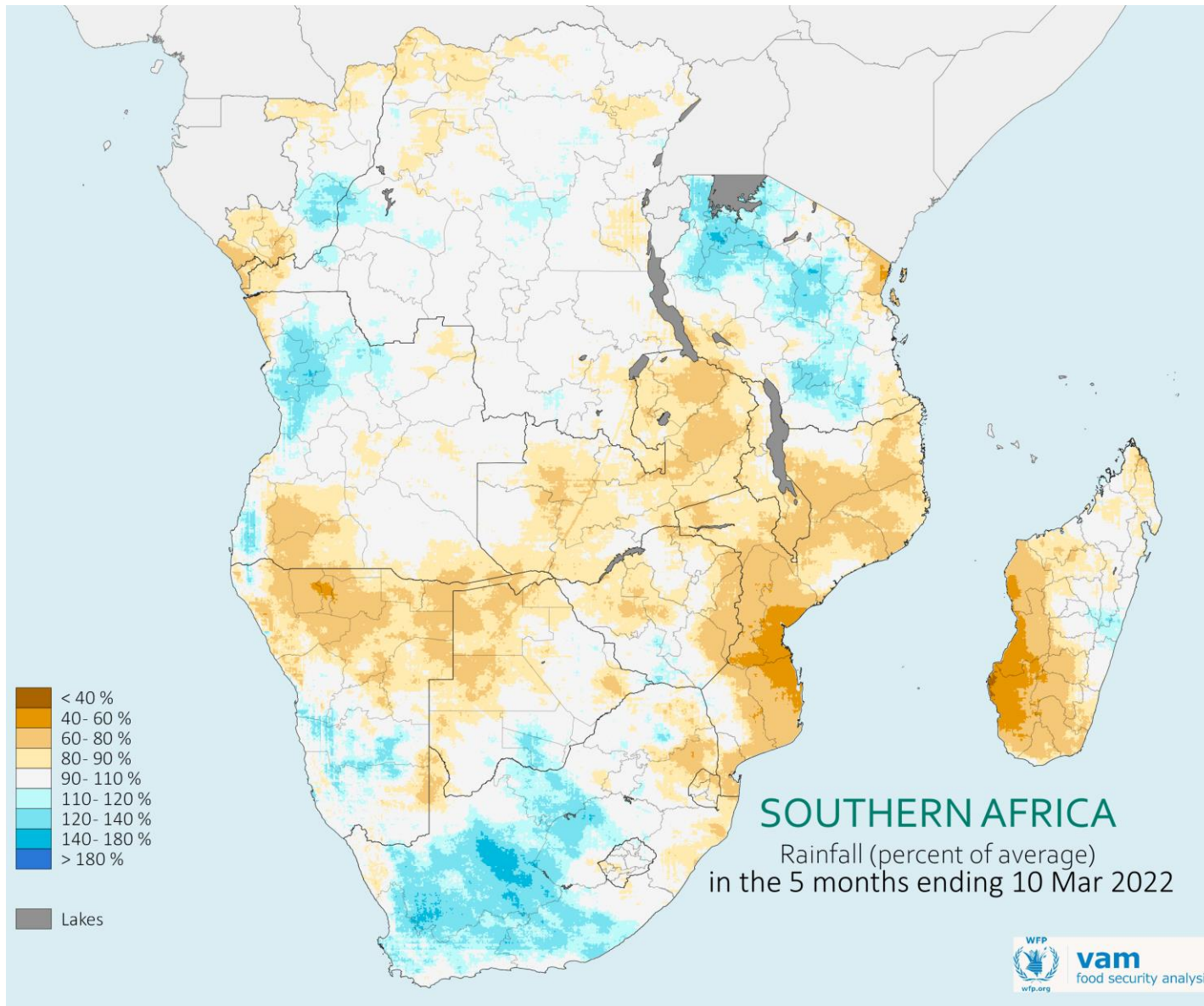
SAVING  
LIVES  
CHANGING  
LIVES

March 2022

<b>The Season So Far</b>	3	<ul style="list-style-type: none"><li>Although rainfall performance improved in January, many areas were still seeing below average conditions when another prolonged dry spell hit in February. Parts of central and southern Mozambique, Zimbabwe, and parts of Zambia and Malawi were affected by extreme dryness from early February to mid-March. Some of these areas experienced their driest February in the past 40 years and serious impacts on rainfed maize production can be expected.</li></ul>
<b>Recent Developments</b>	5	<ul style="list-style-type: none"><li>As of mid-March, the region has been affected by a total of 3 cyclones and 2 storms thus far, all making landfall in the same areas (i.e. certain districts of eastern Madagascar and central/northern Mozambique). Between mid-February and mid-March, Tropical Storm DUMAKO, Tropical Cyclone EMNATI and Tropical Cyclone GOMBE brought much needed rainfall to dry areas in Madagascar and northern Mozambique, but also caused extensive flooding and damage.</li></ul>
<b>Impacts</b>	8	<ul style="list-style-type: none"><li>Given that some forecasts for the remainder of the season project normal to below normal rainfall across much of the region, the outlook is not promising. Below average cereal production is anticipated in Mozambique, Zimbabwe, Madagascar, with severe impacts on production in certain provinces. Parts of Malawi and Zambia are also likely to register below average production.</li></ul>
<b>Outlook</b>	9	<ul style="list-style-type: none"><li>Regional maize supply in the upcoming 2022/23 marketing year is expected to be average, as opening stocks are likely to be above average and production is anticipated to be average at best. Although the region may have adequate maize availability to meet its demand, access among import dependent countries will be constrained by high prices at source markets. This is particularly concerning given that the region has already been seeing elevated prices in major markets such as South Africa and Zambia, and the situation has been exacerbated by global commodity prices skyrocketing following the Ukraine conflict. Although the region does not rely heavily on international maize imports, South Africa's maize prices will likely remain elevated in line with international prices.</li></ul>
<b>Areas and Issues of Concern</b>	11	



# THE SEASON SO FAR: October 2021 – March 2022



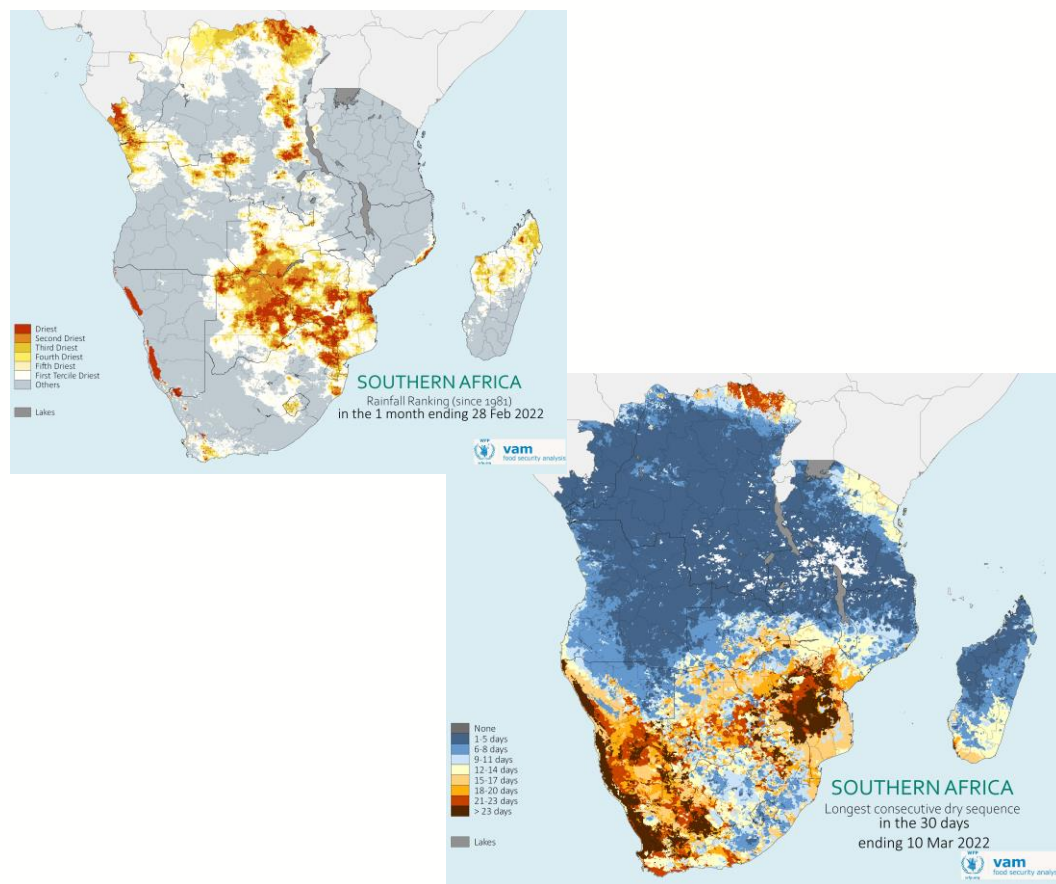
The good rainfall in January was short-lived relief for many parts of the region as it was followed by another prolonged dry spell in February, running into March. February saw a return to dryness for parts of central and southern Mozambique, Zambia and Zimbabwe. In particular, for central and southern Mozambique and Zimbabwe, the way the situation evolved was extremely unfavourable for crop development, with very dry conditions throughout February at a time when maize was close to or at the flowering and grain forming stage when it is especially sensitive to water supply deficits.

Only a few areas benefited from improved rainfall performance from mid-February, such as Tanzania and parts of Angola and Namibia. Other areas, such as Malawi, parts of northern Namibia and southern Angola continued to experience dryness from January. Eswatini and Lesotho, which received average rainfall in the Oct-Dec period and good rainfall in January, experienced marked dryness in February.

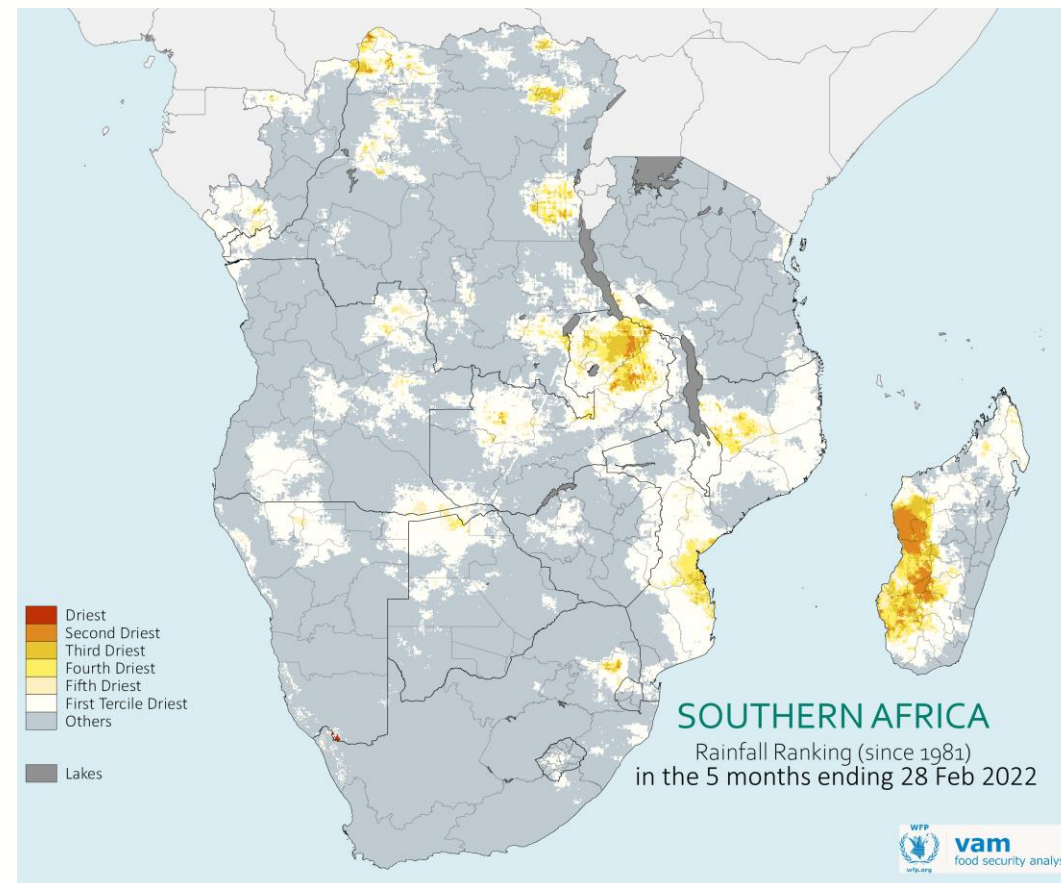
Although Tropical Storm DUMAKO and Tropical Cyclone EMNATI brought heavy rainfall to much of Madagascar and northern and central Mozambique, moisture deficits remain across large areas of both countries. As we have entered the remaining last few weeks of the season, crop prospects are not promising for areas still registering dryness.

*Rainfall in October 2021 to the first dekad of March 2022 as a proportion of the long-term average. Blues for above average conditions, oranges and browns for below average conditions.*

# THE SEASON SO FAR: Overview of Dry Extremes



While the rainfall situation improved in January, February saw severe dry spells across many areas. Parts of central and southern Mozambique, Zimbabwe, southern Zambia, eastern Botswana and western Namibia experienced their driest February in the past 40 years, a situation that extended through most of March. This sharp intense drought will impact negatively on rainfed maize production (maps on the left).



Left: (Top) Rainfall in February 2022 as a rank in the long-term historical record (1981-2020); only dry extremes are represented. (Bottom) Dry spell map of longest consecutive dry sequence from 11 February to 10 March.

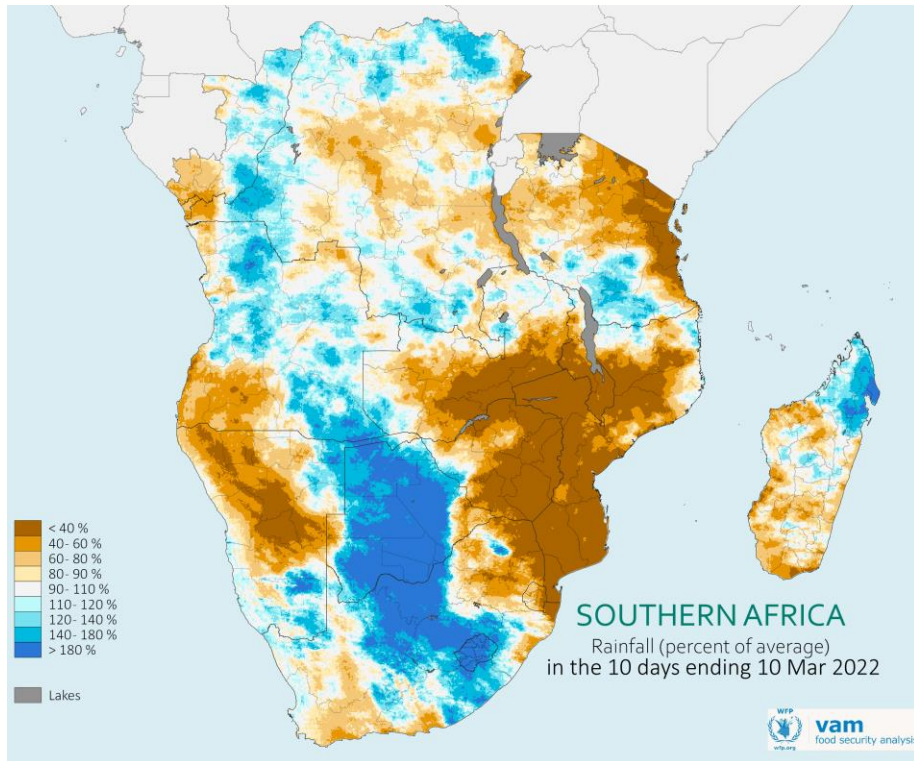
Right: Rainfall in the October 2021 – February 2022 period as a rank in the long-term historical record (1981-2020): Only dry extremes are represented. Dark brown – driest ever rainfall, orange – second driest, dark yellow – third driest, etc.,

When looking at the overall season (i.e. rainfall amount during the October 2021 – February 2022 period), parts of western Madagascar, eastern Zambia and central Mozambique experienced their second to fourth driest season in the past 40 years.

Other areas of Madagascar, Mozambique, Zambia, as well as eastern Zimbabwe, northern Botswana, and parts of Angola and Namibia also experienced one of their top 6-13 driest seasons in the past 40 years (white color).

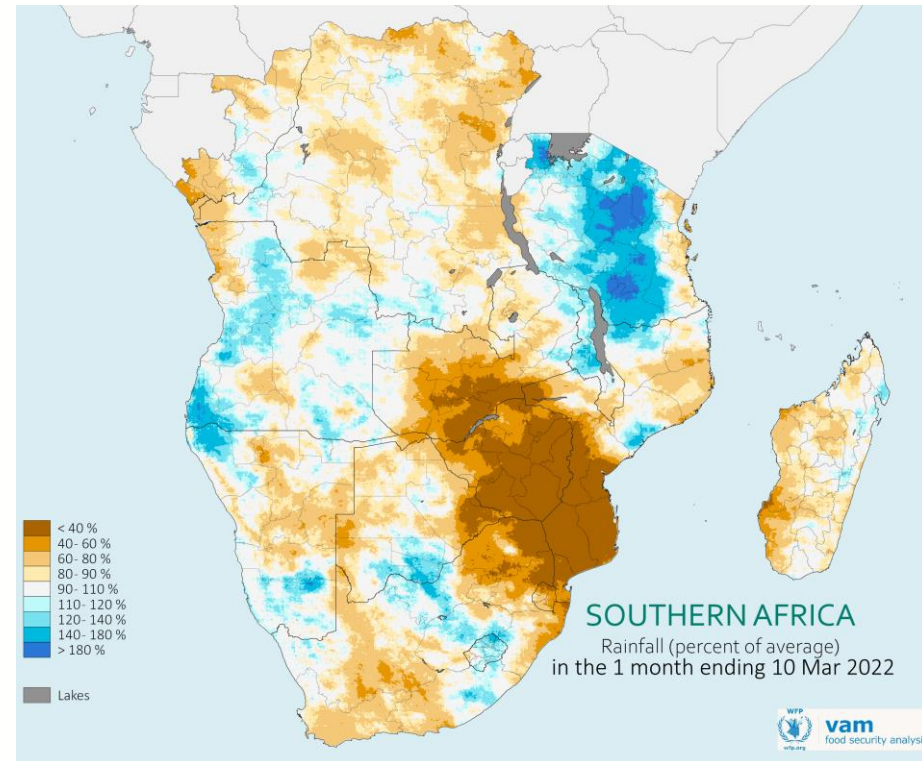


# RECENT DEVELOPMENTS



In the first dekad of March, there was a clear dichotomy between two extremes: areas which received significantly below average rainfall and areas which received significantly above average rainfall.

In both eastern and western parts of the region, large areas received significantly below average rainfall (e.g. Mozambique, Malawi, Zimbabwe, much of Zambia, Namibia, southwestern Angola, Eswatini northern Tanzania and parts of Madagascar). In contrast, the northern part of Madagascar, Lesotho, central South Africa, Botswana and southern Tanzania received significantly above average rainfall (map left).



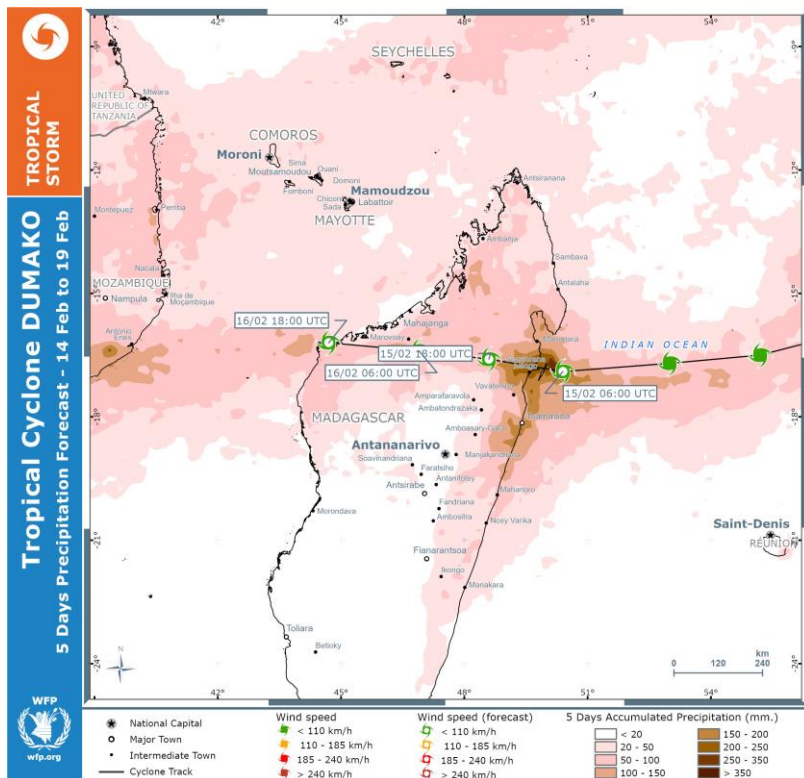
*Rainfall in 1-10 March (left) and 11 February – 10 March (right) as a proportion of the long-term average.*

*Blues for above average conditions, oranges and browns for below average conditions.*

For areas which experienced marked dry conditions throughout much of February, such as Zimbabwe, the southern half of Mozambique and central Zambia, limited rainfall in the last dekad of February and early March only compounded to the pre-existing dryness (map right).

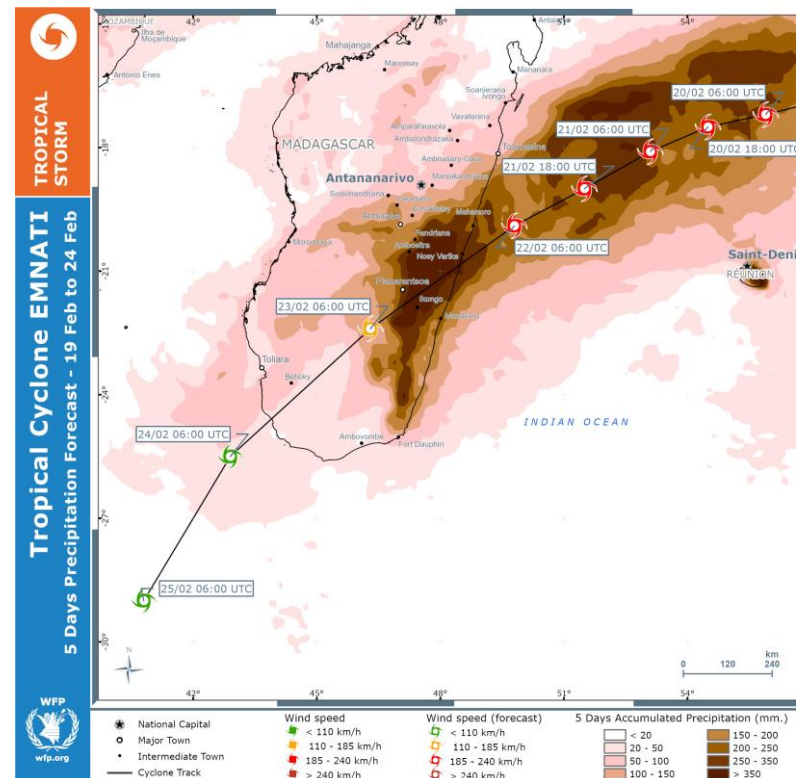
Despite having received significantly above average rainfall with the passage of storms and cyclones, many parts of Madagascar, especially in the west, were still registering dryness in early March.

# TROPICAL STORM DUMAKO & CYCLONE EMNATI



Roughly ten days after Tropical Cyclone BATSIRAI's landfall in Madagascar, Tropical Storm DUMAKO made landfall in Madagascar's Saint Marie and Soanierana Ivongo on 15 February. It brought heavy rainfall (150-250mm/24h) along Madagascar's north-eastern coastal area, especially in the Analanjirofo region, and strong winds exceeding 100km/h in some localized areas.

DUMAKO also brought heavy rainfall (200 mm/24h) accompanied by strong winds to northern and central Mozambique (e.g. parts of Manica province and to Niassa, Nampula, Zambezia, Tete and Sofala provinces.)



Left: Rainfall forecast 14 – 19 February for Tropical Storm DUMAKO

Right: Rainfall forecast 19 – 24 February for Tropical Cyclone EMNATI

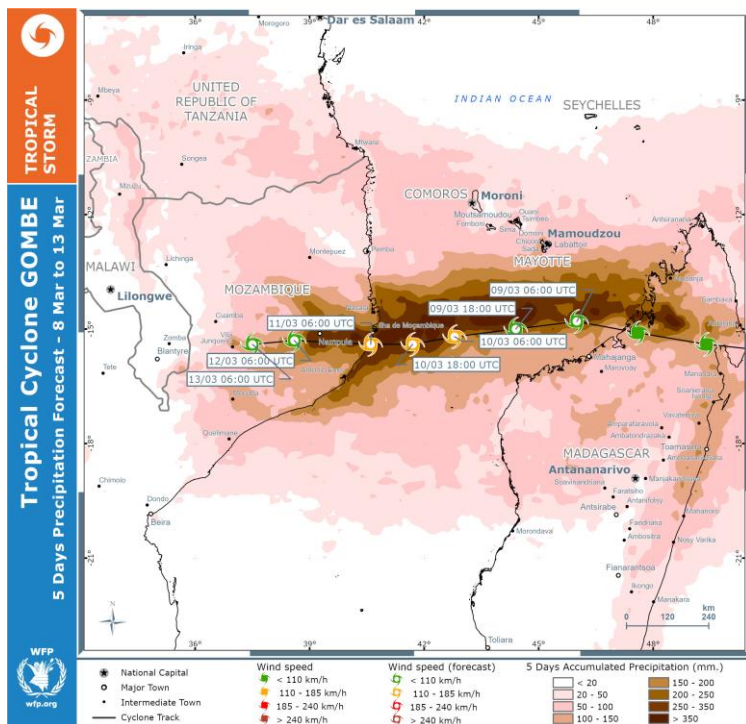
Darker colors (i.e. brown) indicate higher accumulated precipitation.

Following on the heels of DUMAKO, Tropical Cyclone EMNATI made landfall in Madagascar's Manakara district between 22 and 23 February. Its trajectory was very similar to that of BATSIRAI and it brought extensive rainfall (150-300mm/24h and above in some areas) and gusts exceeding 150km/h. As it exited south of Madagascar, it did not affect other countries in the region.

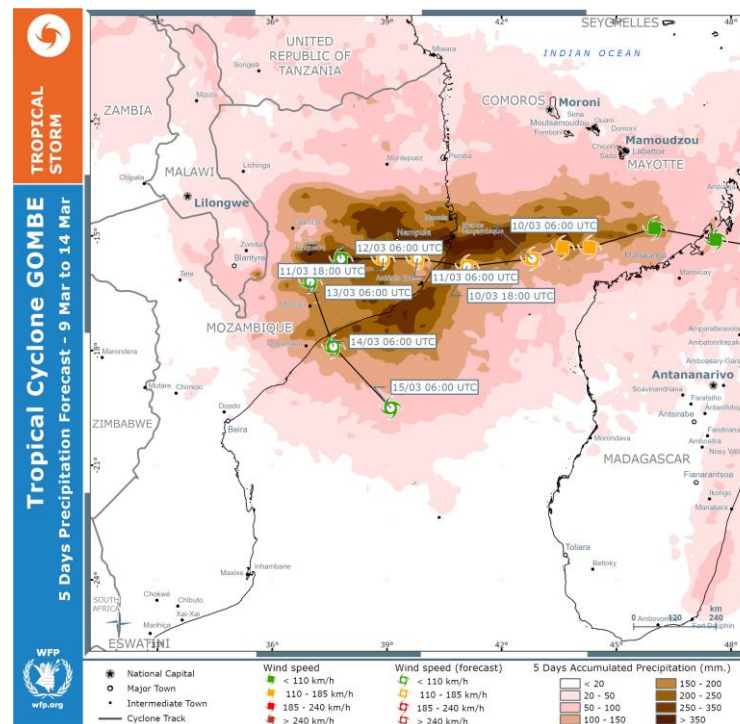
The succession of storms and cyclones brought much needed rainfall to drought affected areas in Madagascar, but also extensive flooding and damage. The results of a multisectoral assessment to determine the extent of damage to crops, livelihoods, and the overall food security situation in Madagascar are expected in late April.



# TROPICAL CYCLONE GOMBE

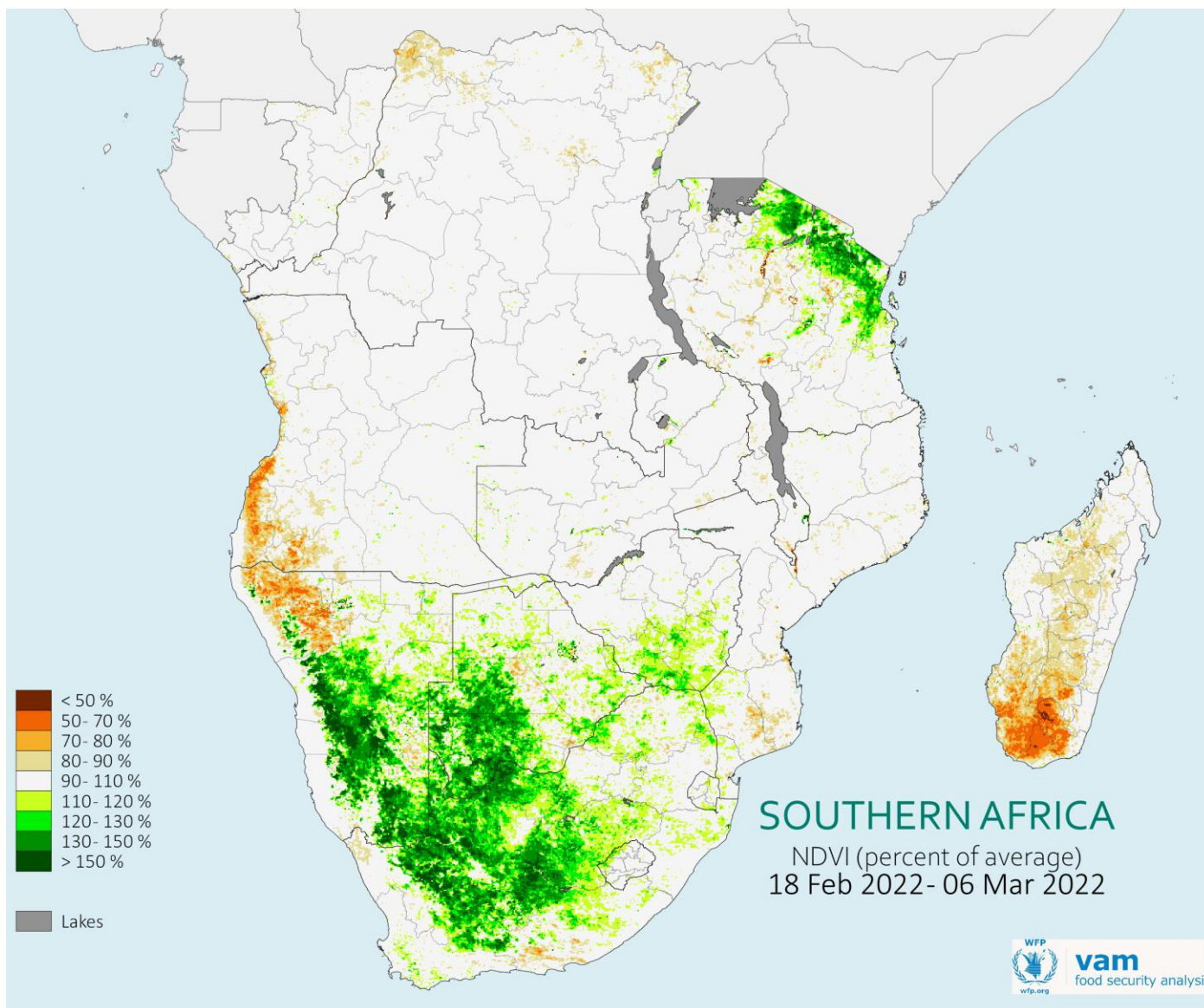


On 8 March, GOMBE made landfall as a tropical storm in north-eastern Madagascar, bringing heavy rainfall (accumulation of 100-150mm/24h and more than 200mm in some localized areas) to areas already affected by ANA and DUMAKO earlier in the season. It tracked westward across northern Madagascar, and by the early hours of 9 March had exited into the Mozambique Channel, where it significantly intensified as it approached the coasts of Mozambique.



On 11 March, intense tropical cyclone GOMBE made landfall near the localities of Mogincual and Terrene in Mozambique's Nampula province. Winds near the coast were estimated at around 165 km/h with maximum gusts of up to 230 km/h. Heavy rainfall (100-200mm/24h and up to 200-300mm in some localized areas) was received in areas along its trajectory, and Nampula and parts of Zambezia provinces were particularly affected. South-eastern Malawi also received rainfall of 70-100mm. After exiting back into the Mozambique Channel, GOMBE made a u-turn back onto land on 17 March as a tropical depression. It brought significant rainfall over areas it had already impacted in Mozambique and Malawi, before dissipating over Malawi.

Left: Rainfall forecast 8-13 March for Tropical Cyclone GOMBE  
Right: Rainfall forecast 9-14 March for the same Cyclone GOMBE  
Darker colors (i.e. brown) indicate higher accumulated precipitation.



Compared to the situation in mid-January to early February, between mid-February and mid-March vegetation improved to average levels in places such as Malawi, northern Mozambique, parts of western Madagascar, southern Tanzania and eastern Zambia. Parts of northern Tanzania and central Namibia saw the most marked improvement, from 50-80% of usual vegetation to over 120% in mid-February to early March.

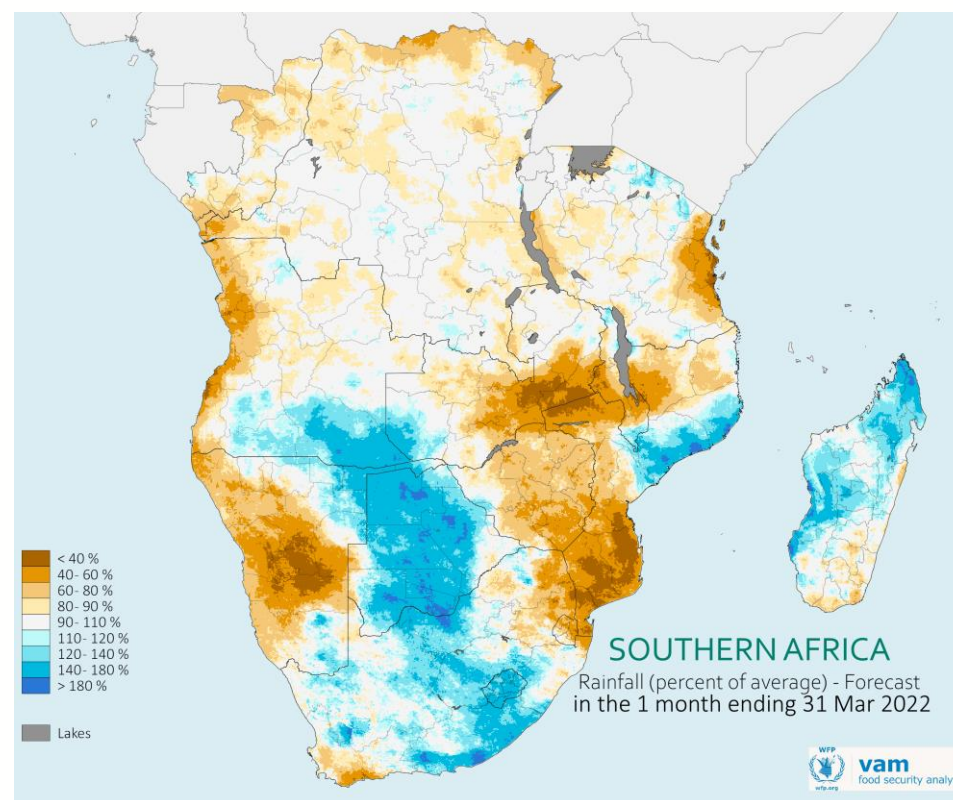
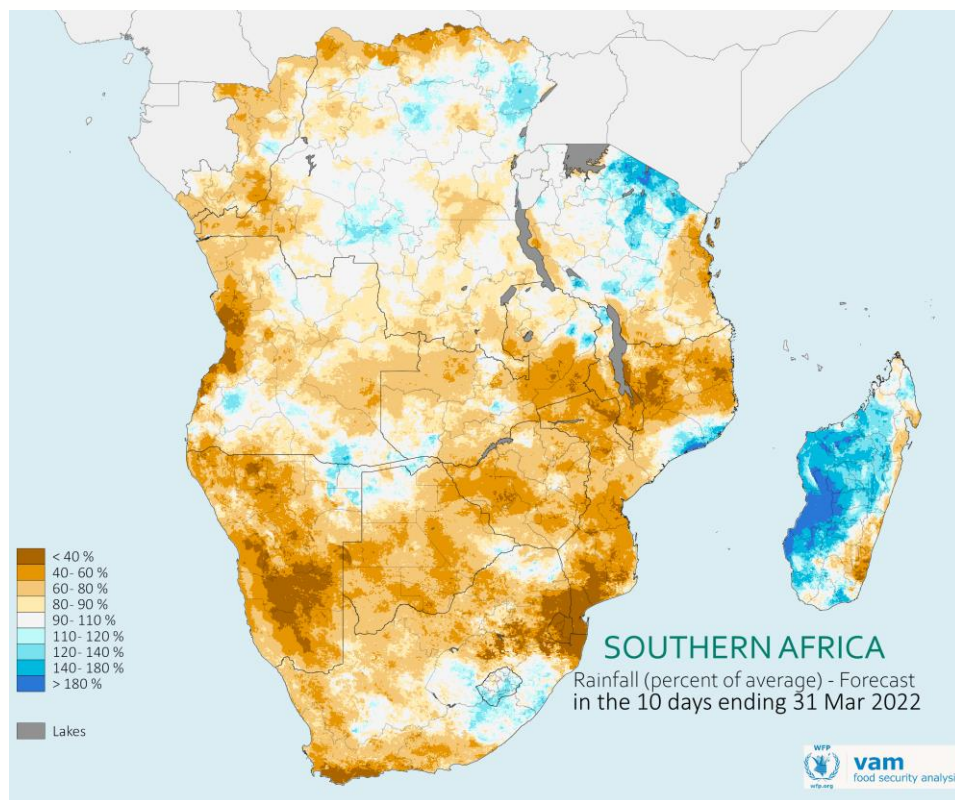
The extensive negative impacts of early season drought are still visible in parts of the region. Although increased rainfall helped to improve vegetation conditions in south-western Angola and north-western Namibia, parts of these areas still registered 50-70% below average vegetation in mid-February to early March. Also, despite the passage of EMNATI which brought significant rainfall to southern Madagascar in mid-February, the region's vegetation development remained below average.

As of early March, other parts of the region that experienced dryness in February were still registering average vegetation conditions. This is likely due to the lag in vegetation indices; they can take time to adjust to reflect dry conditions if the vegetation is mainly shrub or trees. Crops in the area, however, would still have suffered as they cannot avail from water in deeper soil layers.

*Vegetation cover in mid-February to early March compared with the long-term average. Green shades for above average vegetation, orange shades for below average vegetation.*



# SHORT RANGE OUTLOOK: March 2022



*Left: forecasted rainfall in 22-31 March compared to average.*

*Right: forecasted rainfall 1-31 March 2022 compared to average.*

Dryness was forecast across much of the region for the 3<sup>rd</sup> dekad of March, indicating the continuation of dry spells from February for some areas (map left). If this coincides with the flowering and grain filling development stages of maize, there could be serious impacts on production in countries such as Mozambique, Malawi, Zambia and Zimbabwe.

Only a few areas were forecast to receive significantly above average rainfall, such as Madagascar, the coastal area of Mozambique's Zambezia province and northern Tanzania, while parts of Lesotho and small areas of Zambia, Namibia and Angola were also forecast to receive above average rainfall.

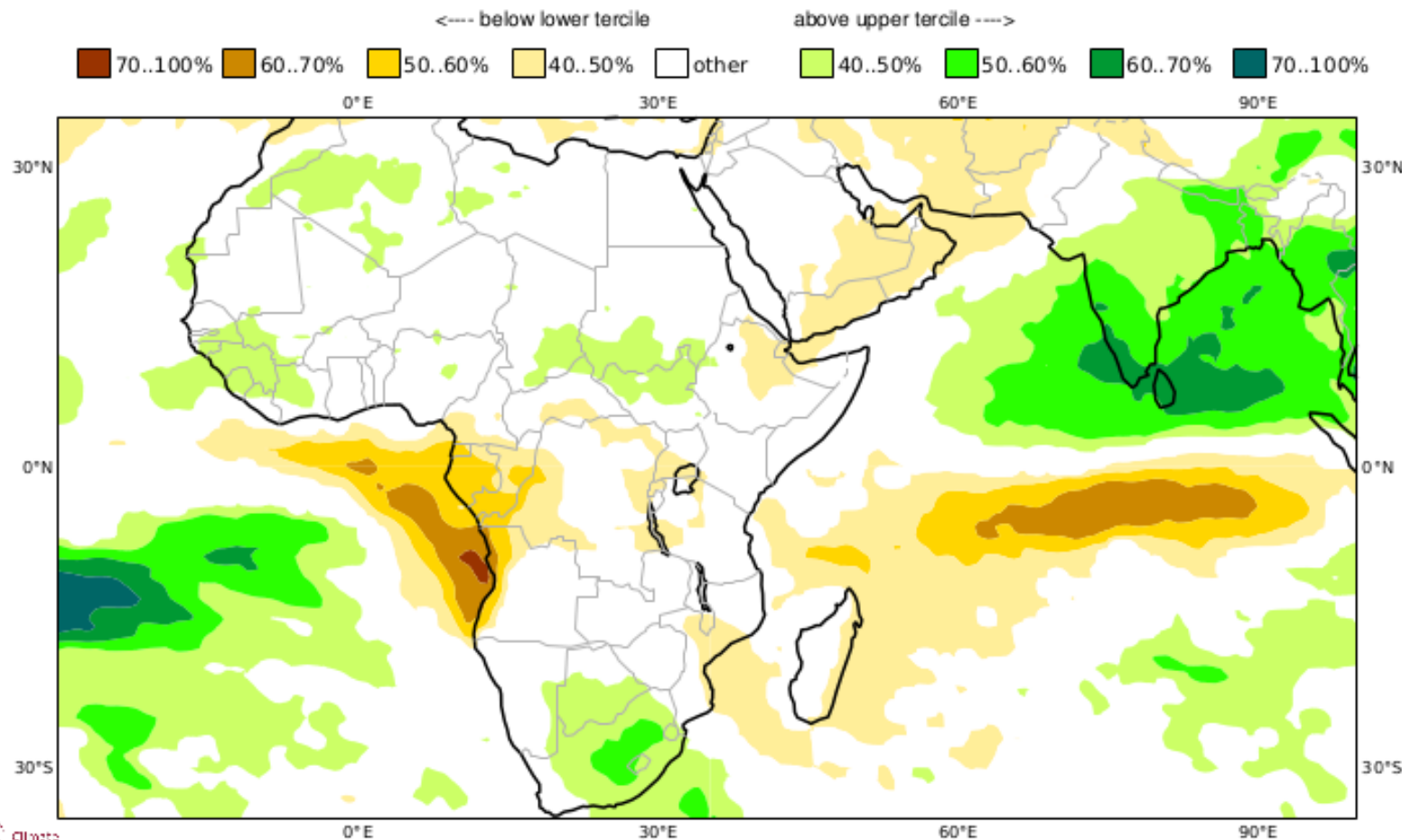
A combined forecast using estimated rainfall data from the first two dekads of March indicates above average rainfall in western and northern Madagascar, Nampula and Zambezia provinces of Mozambique, southern tip of Malawi, Botswana, south-eastern Angola, central South Africa and Lesotho (map right).

Central and southern Mozambique, Zimbabwe and eastern Zambia are expected to remain dry, and as it is already late in the season, these areas are unlikely to see full recovery of agricultural performance. Dry conditions are also expected to persist in western Angola and central Namibia.

# LONG RANGE OUTLOOK: March - May 2022

C3S multi-system seasonal forecast ECMWF/Met Office/Météo-France/CMCC/DWD/NCEP/JMA/ECCC  
Prob(most likely category of precipitation) MAM 2022  
Nominal forecast start: 01/02/22  
Unweighted mean

*Probability of MAM rainfall being above usual from C3S multi-system seasonal forecast, issued Feb 2022*



The C3S multi-system seasonal forecast issued in February points to average rainfall across much of the region in the March – May 2022 period.

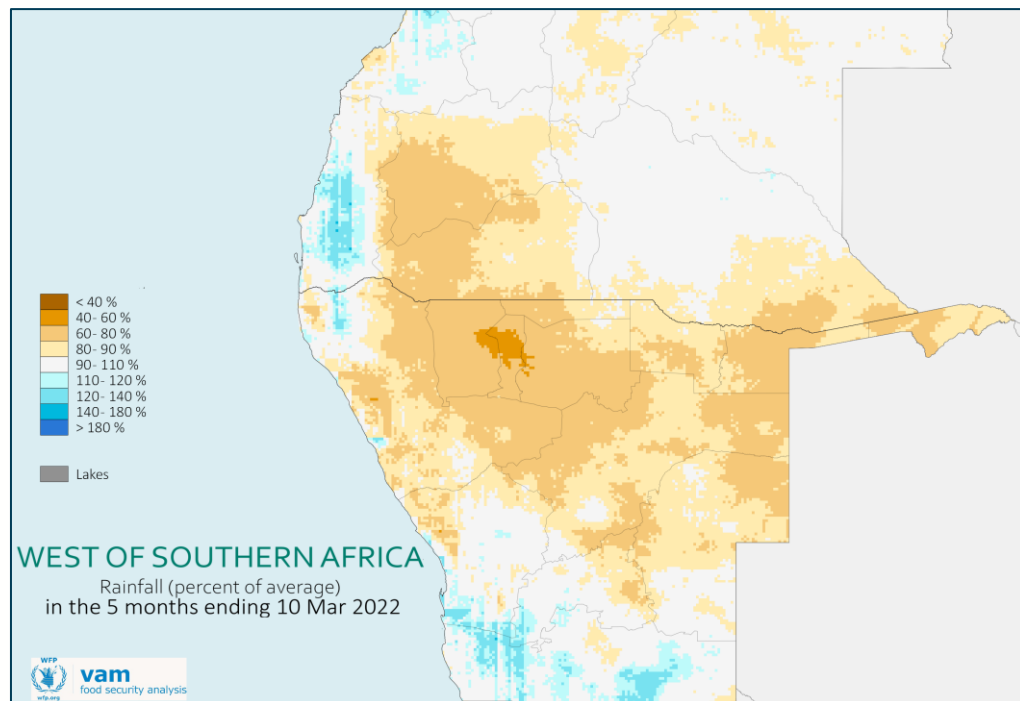
Central Mozambique, southern Malawi, western Angola and parts of Tanzania are expected to experience dryness for the remainder of the season.

Eastern Madagascar, which received significant rainfall brought by multiple storms and cyclones, is also forecast to receive slightly below average rainfall for the remaining last few weeks of the season.

In contrast, much of South Africa, southern Botswana, Eswatini and Lesotho are expected to receive above average rainfall.

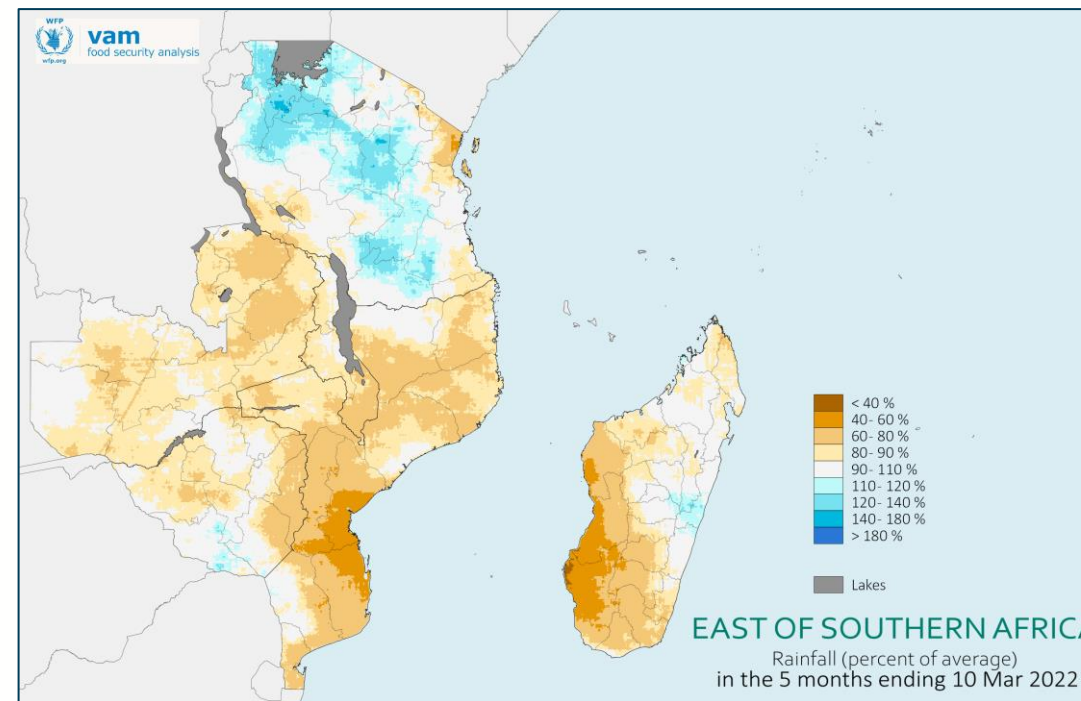


# AREAS OF CONCERN



Despite increased rainfall across many parts of the region since January, parts of southern Angola as well as northern Namibia remain drier than average (i.e. 40-80% of usual rainfall amounts). The recurrent effects of drought are visible in these areas with poor vegetation in the west (p. 8), and crop performance in these areas is concerning given the high temperatures and significant moisture deficits.

As rainfall outlook for these regions in the March-May period does not indicate any improvement, they are likely to see another below average harvest this year.

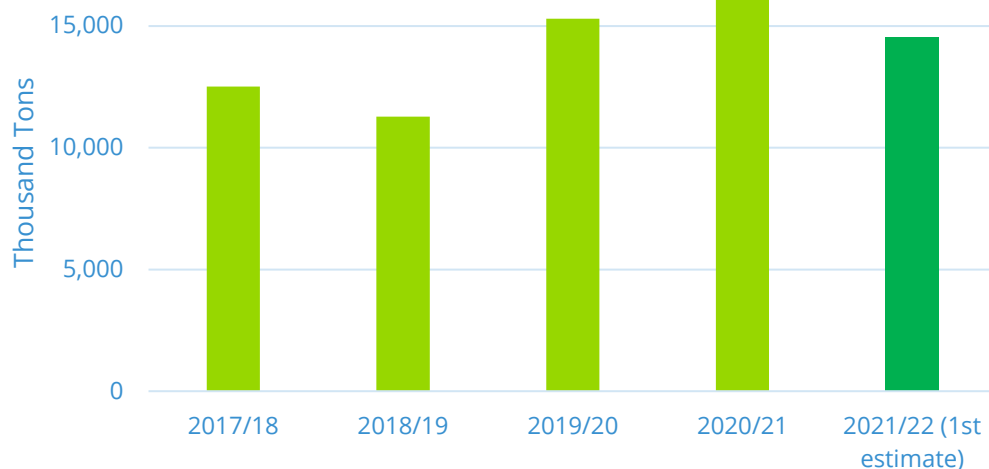


Seasonal performance up to the end of the first dekad of March also shows below average rainfall in southern and western Madagascar, as well as much of Mozambique, Malawi, eastern and central Zambia, as well as large parts of Zimbabwe. This is despite the heavy rainfall brought by successive tropical storms and cyclones. In particular, parts of Mozambique and Zimbabwe registered significant rainfall deficits from February to mid-March.

Crop prospects for many of these areas are likely to be compromised given the continued dryness combined with episodic excessive rainfall and flooding.

# ISSUES OF CONCERN

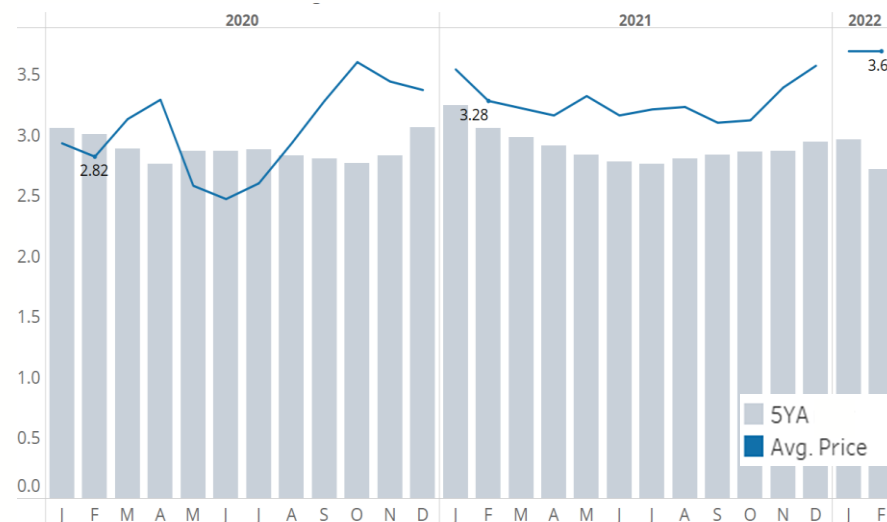
South Africa Maize Production



Owing largely to above average harvests in 2021, the 2021/22 marketing year is likely to close with average to above average maize stocks in the region.

Given mixed seasonal performance, maize harvests this year will be varied across countries. Despite some heavy rains and flooding, South Africa's first production estimate figures indicate an above average harvest of 14.5 million MT. This figure, however, is lower than that of the previous two years. Countries that have experienced pronounced dry spells and episodic rainfall (e.g. Zimbabwe, Mozambique, Madagascar, parts of Malawi and Zambia) will see decreased production compared to last year.

South Africa Maize Prices, ZAR/KG



Left: South Africa's maize production (total for white and yellow), data source: SAGIS

Right: South Africa wholesale maize prices, data source: SAFEX, FAO

The anticipated combination of above average regional opening stocks and average production at best imply average regional maize supply in the 2022/23 marketing year. Although the region may have adequate maize availability to meet its demand, access among import dependent countries will be constrained by high prices at source markets. This is particularly concerning given that the region has already been seeing elevated prices in major markets such as South Africa and Zambia, and the situation has been exacerbated by global commodity prices skyrocketing following the Ukraine conflict. Although the region does not rely heavily on international maize imports, South Africa's maize prices will likely remain elevated in line with international prices. Moreover, for products for which the region is a net importer and price-taker (e.g. wheat, vegetable oil and petroleum products) prices have already surged.



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