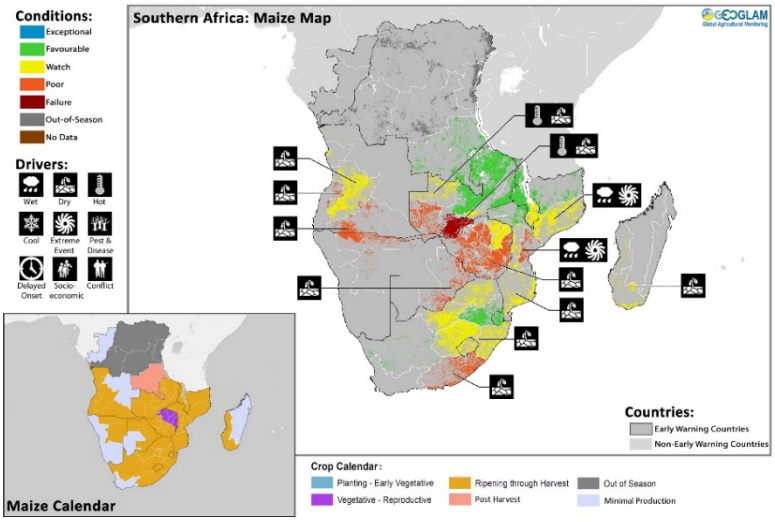
Southern Africa 2018/19 summer crops updated April 18, 2019

Highlights:

- The southernmost region of the African continent started the 2018/19 summer cropping season with rains delayed by nearly a month. The long delay in onset resulted in reductions in planted area across key cropping areas of South Africa and Zambia.
- Limited rainfall following the delayed start, resulted in wilting and below average yield prospects for crops, especially maize in Angola, Namibia, Botswana, Zimbabwe and southern parts of Zambia and Mozambique.
- High maize producing areas of southern Zambia are currently experiencing their worst drought since 1981 and production prospects are below average.
- Recovery from Tropical Cyclone "Idai" continues across Mozambique, Zimbabwe and southern Malawi.

Season Progress to date:



In Southern Africa, the 2018/2019 main summer cropping season is ending across much of the region. Production prospects have worsened across many areas due to intensifying drought in March, further compounding an already challenging season. After nearly a month delayed start of the rains resulting in reduced planted area across some of the key maize growing areas of **South Africa** and **Zambia**, some rainfall came in early January, reducing rainfall deficits in the east. However, this was followed by a number of long dry spells, the most significant of which lasted for 4-6 weeks from mid-February to late March across the central and central west parts of the region resulting in widespread wilting across the worst affected areas of **Angola**, **Namibia**, **Botswana**, **Zimbabwe** and southern parts of **Zambia** and Mozambique. Dry conditions continued and intensified until the second week of March when Tropical Cyclone Idai struck central **Mozambique** as a high impact event causing heavy rains and floods and resulting in significant damage across central Mozambique damaging also southern Malawi and eastern Zimbabwe.

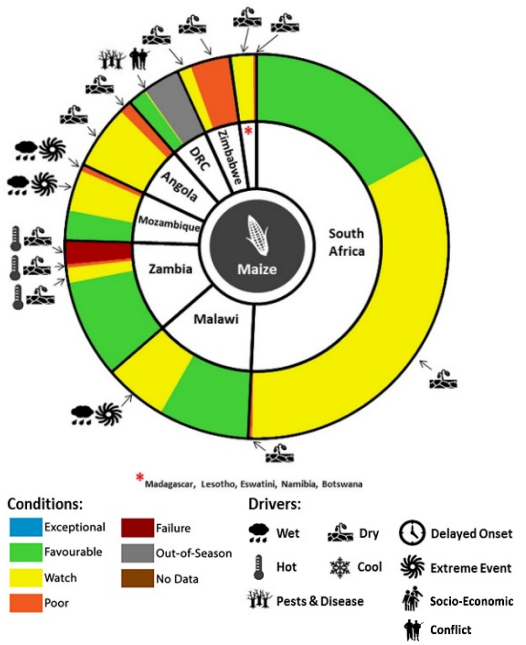


Figure 1: Maize crop conditions and associated pie chart showing impact on production as of March 28th, 2019. Crop Monitor for Early Warning, April 2019.

Production Highlight: Crop failure over the high maize producing areas of southern Zambia

The main cropping season across southern Africa started with a late onset of rains that resulted in reduced planted area in some of the key maize growing areas for the region, including parts of **South Africa** and **Zambia**. This was followed by several long dry spells that negatively affected crop development, the latest and most damaging of which lasted 4-to-6 weeks across many central and western areas.

The high producing region of southern **Zambia** was at the epicenter of this 6-week dry spell. Analysis of the CHIRPS rainfall dataset indicates that several districts in southern Zambia are currently experiencing their driest season since at least 1981. These include districts that are typically among the five highest producing districts in the country (out of 75 districts). Southern Zambia as a region has experienced significantly below average NDVI, cumulative precipitation, and soil moisture throughout the season (Figure 3.) and yields are expected to be significantly below average across these areas. In March, a combined crop tour by representatives from IAPRI, Zambia Ministry of Fisheries and Livestock, USDA/FAS, and FEWS NET visited districts in southern and central Zambia. The team observed that in some of the worst affected parts of southern Zambia, many seasoned farmers who had planted several hectares in December 2018 lost their entire crop this year, as large maize fields permanently wilted (e.g. Figure 2.) due to the prolonged dryness. Given the high capital investment required for farming, the severity of crop loss experienced this year can impact the capacity of these high-producing farmers to plant in the 2019/20 season, without targeted assistance.

In addition to the direct impacts on farming, there are reports of dams running dry and significantly decreased ground water levels with implications not just for crops but also for livestock and water security. In normal years, **Zambia** is a surplus maize producer and an important regional exporter. Following impacts from drought, national maize production is expected to be below average for the second consecutive year. Preliminary estimates for 2019 maize production are between 2-2.2 million tonnes. This below average production is associated with declines in southern, western and to a lesser extent central provinces that together make up close to one third of the national maize output (FAO Global Information and Early Warning System). While production and carry-over stock may be sufficient to meet domestic markets, regional export potential will most likely be affected. According to the latest FAO GIEWS Global Food Price Monitor and Analysis (FPMA) report, prices of maize in March were 60 percent higher than in March last year[1]. The crop situation, together with a currency depreciation, corroborate the price increases. With widespread drought conditions and below average production prospects across the region in addition to recent damage from Cyclone Idai across neighboring countries, regional maize supply is of increasing concern.

Figure 2: Maize fields in southern Zambia showing impacts from drought conditions throughout the season and recent

[1] Zambia, National average, retail, maize (white)

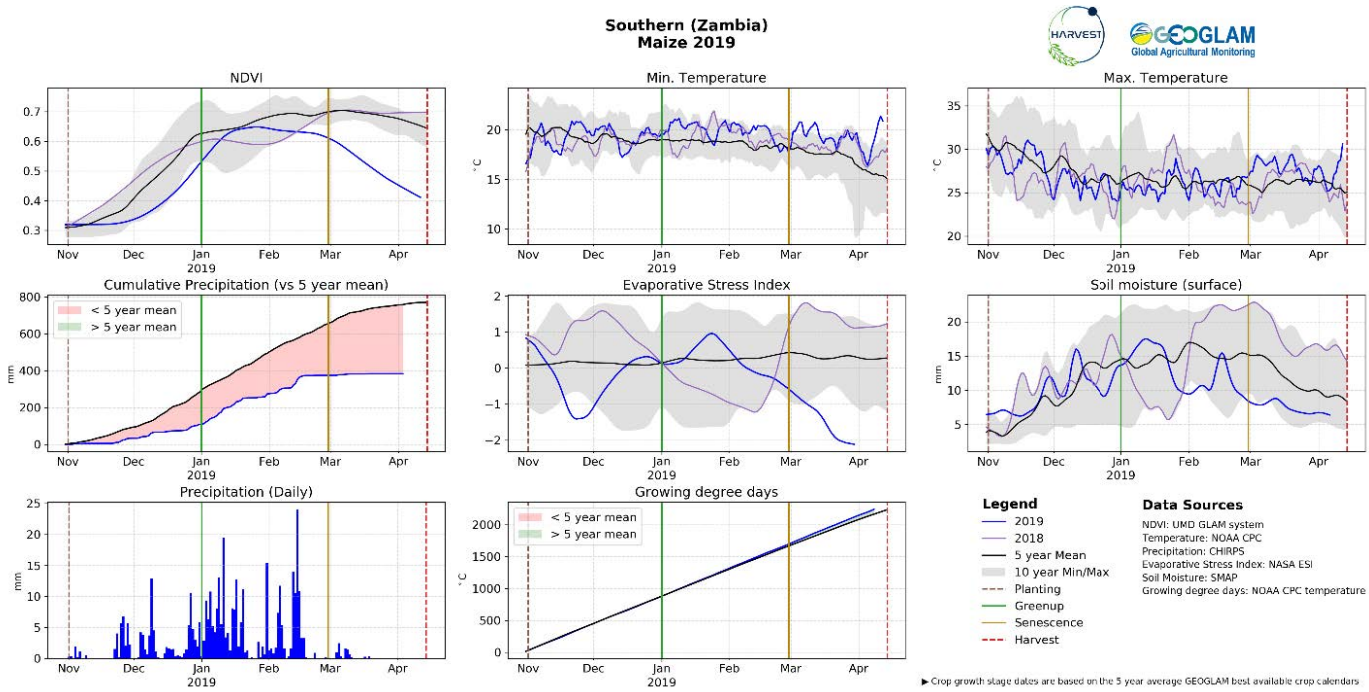


Figure 3: Agro-climatic indicators over the current 2019 season. Drier than average conditions early in the season followed by several long dry spells further damaging crop development.

Update: Tropical Cyclone Idai

Tropical cyclone Idai started as a tropical depression that first made landfall in Mozambique on March 4th. Over the next few days it brought high rainfall to Mozambique and southern Malawi, before re-entering the Mozambique Channel on March 9th. After strengthening to Cyclone force, Idai made landfall in central Mozambique the night of March 14th, bringing heavy rains, and strong winds to central Mozambique and eastern Zimbabwe. Overall, the cyclone brought widespread flooding and significant damage across central Mozambique, eastern Zimbabwe and southern Malawi, causing fatalities and injuries, and significant damage to infrastructure, homes and croplands, as well as leaving hundreds of thousands displaced.

In **Mozambique**, significant flooding and damage resulted in Inhambane, Manica, Tete and Zambezia provinces with the worst affected areas in Sofala province. The extent of the flooding in Zambezia province is shown in Figure 4. for the period of March 14th through 20th at the height of the cyclone impact. From this high impact event, an estimated 1.85 million people are in need of humanitarian assistance and 131,000 people have been displaced across Sofala, Manica, Zambezia and Tete (UN OCHA). The government of Mozambique estimates that more than 715,000 ha of cropland have been affected by flooding, causing high concern for short- and long-term food security (UN OCHA). According to GIEWS FPMA report, prices of corn continued to climb in March and were more than double their year-earlier levels in some northern markets. Negative crop prospects, higher prices in South Africa due to the crop situation, and the depreciation of the currency triggered the price spike.

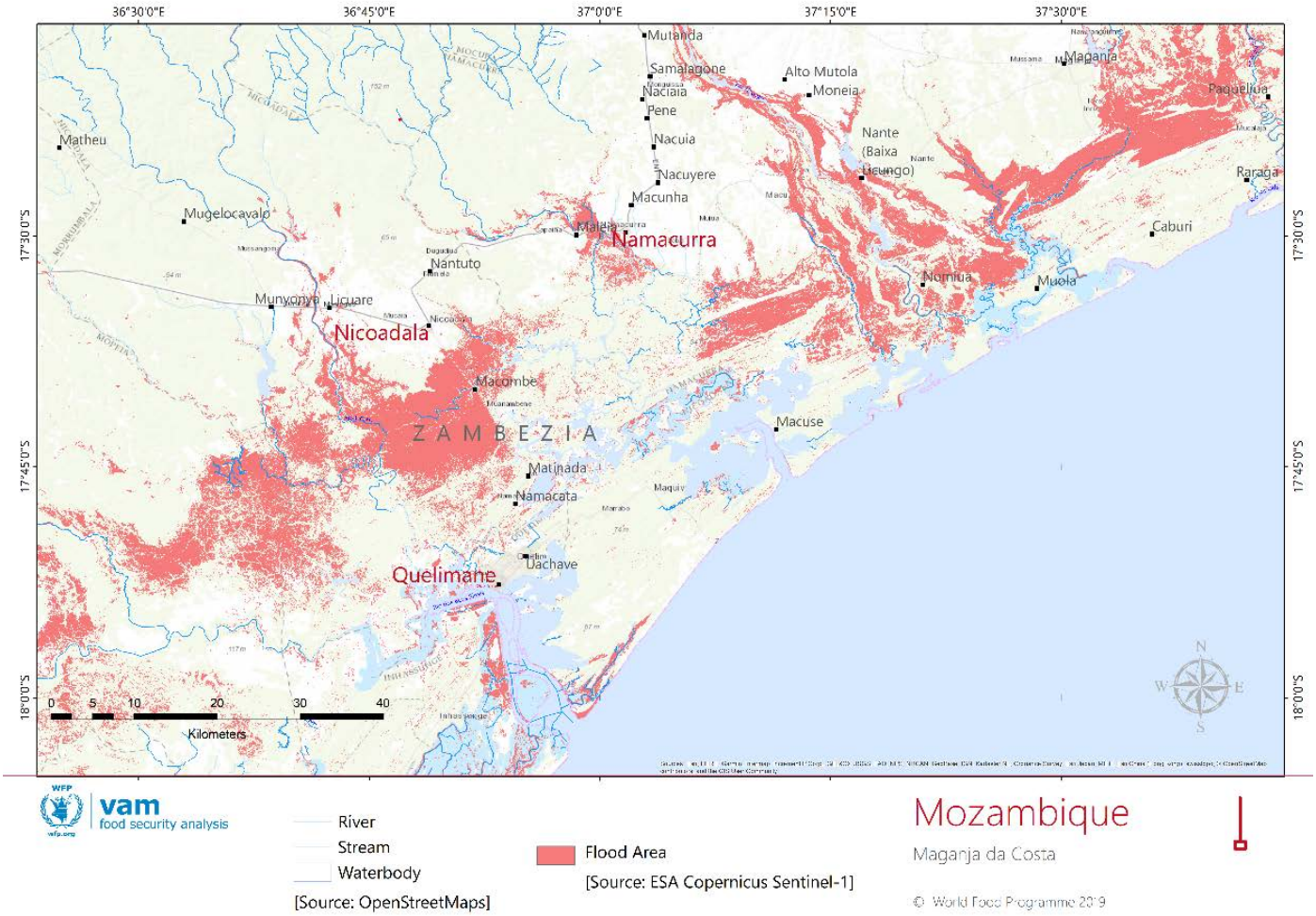


Figure 4: Flood extent over Zambezia province of central Mozambique for the period of 14-20 March. Source: WFP-VAM

In **Zimbabwe**, cyclone Idai brought torrential rain and heavy winds over the eastern province of Manicaland. This followed a previously dry season with cumulative rainfall at 80 percent of the average and the heavy rain received from Idai resulted in riverine floods, flash floods and landslides over the worst affected districts of Chimanimani and Chipinge. An estimated 270,000 people are in need of humanitarian assistance (UNOCHA). Prices of maize meal products, which rose steeply in February, were around 50 percent higher on a yearly basis, according to the latest GIEWS FPMA report[2]. Several factors collaborate to this spike, such as volatile and weaker currency (which negatively impacted production and transportation costs) and crop situation, among others.

In southern **Malawi**, an estimated, 868,900 people have been impacted and 87,000 people are estimated to be displaced by the event (UNOCHA). The worst affected areas are over Nsanje and Chikwawa districts. Prior to impacts from cyclone Idai, initial national crop prospects stood at 26% above average due to increased planting area and good rains received. Following flooding, further monitoring will be needed to assess the impacts on final yields. Price increases of corn persisted across the country, according to GIEWS FPMA, due to a tighter-than-normal supply situation in the previous season and implication of Cyclone Idai that disrupted the normal market functioning.

[2] Retail prices in US dollar per 10 kg, Harare, Manicaland, Mash West, Bulawayo.

Potential Outcomes:

While recovery is unlikely given crop development stages are complete and majority of southern Africa's maize crops are now under harvest, weather conditions during harvest will be important in maintaining current yields. As harvesting gets underway in the coming weeks and months we will continue to monitor the situation up until final harvests in May.

Implications of the Cyclone Idai to regional infrastructure and its effect on prices of different food products are still a concern for food security.

The GEOGLAM Crop Monitor team is monitoring the situation. Further information will be provided in the next Crop Monitor for Early Warning and Crop Monitor for AMIS reports, to be released May 9th.

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