



Food Security Early Warning System Agromet Update



2020/2021 Agricultural Season

Issue 04 Month: February

Season: 2020-2021

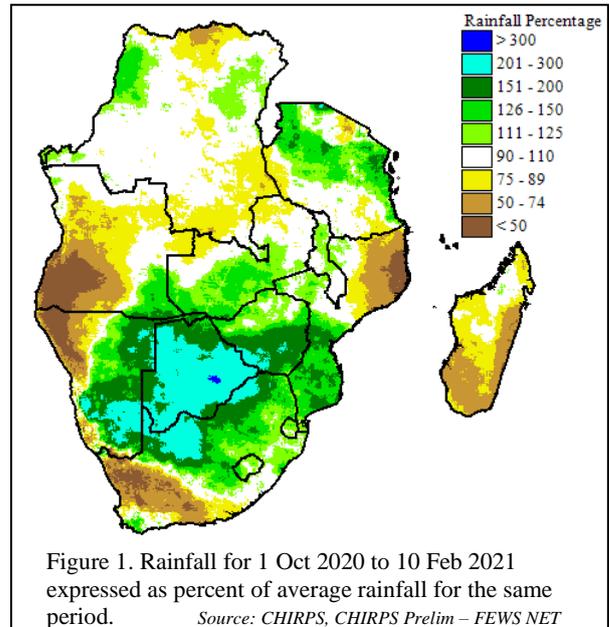
26-02-2021

Highlights

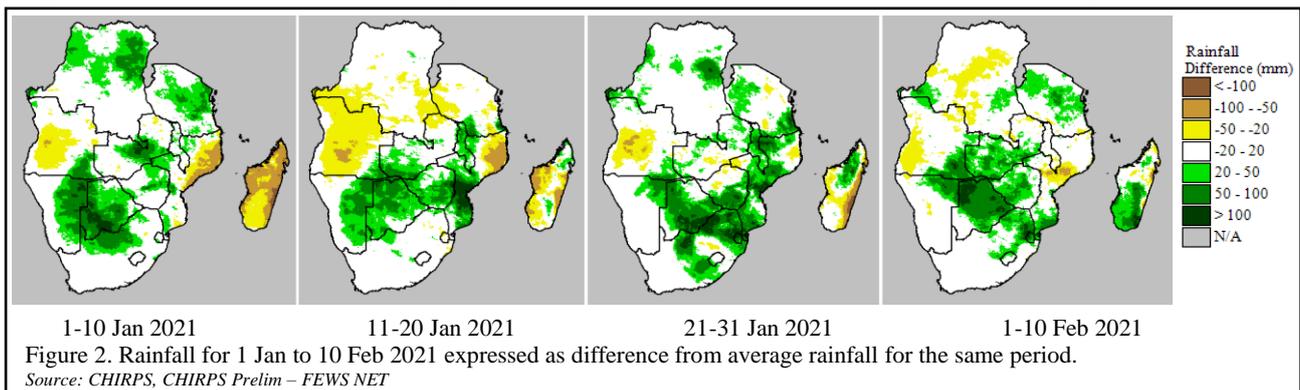
- Good crop conditions were noted in most parts of the region due to consistent rainfall that has occurred during the season.
- Poor rainfall continued in south-western Angola and north-western Namibia, affecting crop and grazing conditions
- Rainfall improved in southern Madagascar in late January and early February, partially reducing the strong rainfall deficits associated with the protracted drought.
- The African Migratory Locust outbreak continued in Angola, Botswana, Namibia and Zambia. Swarms of desert locusts were also observed in Tanzania. Control efforts are ongoing.

Rainfall patterns to date

Above-average seasonal rainfall has been received to date in most of the southern half of the region and northern Tanzania, while well below average rainfall was received in western Angola, much of Madagascar, north-eastern Mozambique, north-western Namibia and south-western South Africa (Figure 1). Most of Botswana and parts of Namibia, South Africa and Zimbabwe received more than double their average rainfall for October to early February, driving among the wettest seasons since 1981. However, in south-western Angola and north-western Namibia had less than half the average rainfall and is among the driest seasons since 1981. Flooding was reported between December and February in several areas including parts of Eswatini, central Mozambique, southern and central Namibia, southern Tanzania, southern and eastern Zambia, South Africa, western DRC, and eastern Zimbabwe. The flooding resulted in fatalities, displacements, and some destruction of infrastructure and crops. Many dams across Zimbabwe are reportedly full due to heavy rainfall. Full dams further raise possibility of flooding downstream.



Between 1 January and 10 February, consistent heavy rainfall was received in many central parts of the region (Figure 2). Parts of south-eastern Angola, Botswana, and north-eastern Namibia continually received above-



average rainfall in each 10 day period between these dates. After below-normal rainfall in the first half of this period, southern Madagascar finally received high rainfall from late January through to early February. Southern Madagascar has been in the grip of a severe drought, having experienced successive droughts in the last few seasons, and large rainfall deficits remain, despite the rainfall received in early 2021.

Tropical Storms and Cyclones

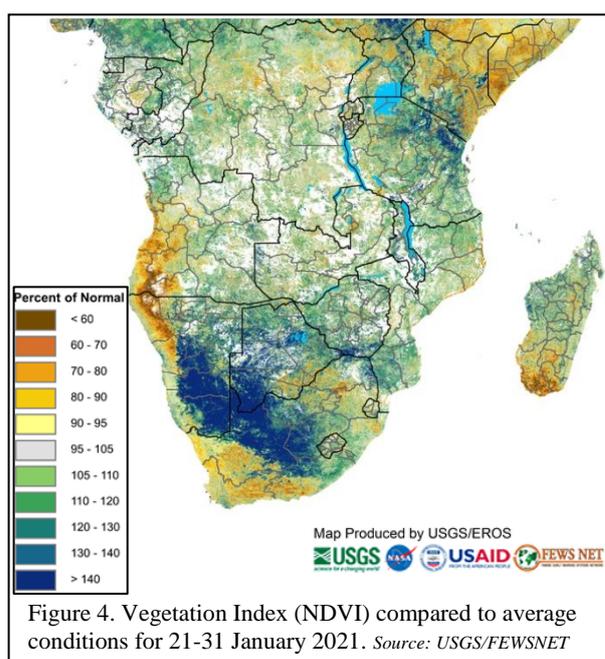
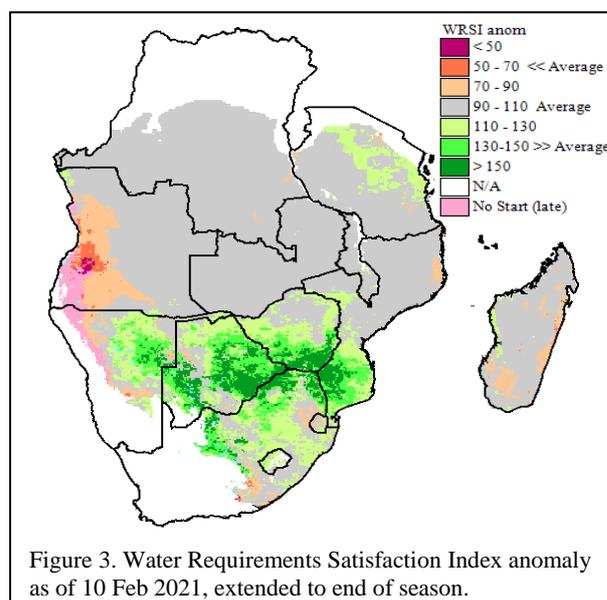
Tropical Cyclone Guambe began as a tropical disturbance in the Mozambique Channel on 10 February, made landfall in southern Mozambique, and re-emerged in the Mozambique Channel several days later, before strengthening to a Tropical Cyclone. Guambe dumped large amounts of rainfall in southern Mozambique, resulting in widespread flooding that destroyed homes and crops and caused displacement of people. Some of the areas affected by Guambe had already been flooded by Tropical Cyclone Eloise, and as a result, were at a greater risk of flooding as soils were already saturated. In January, large areas of cropland were flooded by Tropical Cyclone Eloise in Mozambique, which also affected parts of Eswatini, Madagascar, South Africa and Zimbabwe. In late December 2020, Tropical Storm Chalane had also caused some flooding in Mozambique.

Crop conditions

Most parts of the region have received sufficient rainfall to support crop growth, as indicated by analysis of the water requirements satisfaction index (WRSI). The WRSI anomaly map (Figure 3) shows that better than average conditions exist in much of Botswana, southern Mozambique, north-eastern Namibia, parts of South Africa, central Tanzania, and southern half of Zimbabwe. In contrast, parts of western Angola, as well as southern and eastern Madagascar, are expected to have below-average WRSI conditions by the end of the season, with negative expected impacts on harvest outcomes. According to field information received, crops were reported to be in good condition in Botswana, Eswatini, Lesotho, Malawi, South Africa, unimodal areas of Tanzania, Zambia and Zimbabwe. The reported crops were ranging between vegetative and maturing stages. The high rainfall in some areas however negatively affected crop growth in some areas, as noted in reports from north-eastern and central Botswana, Tanzania, South Africa, Zambia, and Zimbabwe, due to persistent rainfall, flooding, waterlogging and leaching. In bimodal parts of Tanzania, off-season rainfall negatively affected harvesting and drying of the Oct-Dec season maize, while land preparation was on-going for the March-May season. Some maize crops over parts of southern Malawi were reported to be water stressed.

Livestock and pastures

Vegetation conditions continued to improve in most areas due to the good rainfall that was received. The normalized difference vegetation index (NDVI) is well above average in parts of Botswana, Namibia, and South Africa (Figure 4). This is a positive development for these countries, which are all large scale livestock producers requiring significant amounts of forage for livestock. Grazing conditions had deteriorated in these countries due to drought in past seasons. Most other parts of the region had slightly above average vegetation conditions by late January through to mid-February. Poor vegetation conditions continue in south-western



Angola, southern Madagascar, north-western Namibia, and western South Africa due to low rainfall. Grazing conditions in Botswana, Eswatini, Lesotho, Namibia, South Africa, Tanzania and Zimbabwe were reported to be good, and livestock were in good condition. In southern and western Namibia however, both pasture and livestock were noted to be in poor condition, with some livestock emaciated and dying due to malnutrition. Clostridial diseases, which are riskier with high rainfall, were reported to be affecting small stock in Kgalagadi, Botswana.

Crop pests and diseases

Locust outbreaks

The African Migratory Locust (AML) outbreak has continued in the region, with recent sightings reported in Angola, Botswana, Namibia, and Zambia. High rainfall and abundant vegetation have provided optimal conditions for the breeding and multiplication of the AML. Swarms of locusts have been observed moving between south-eastern Angola, north-western Botswana, north-eastern Namibia, and south-western Zambia. Swarms of Desert Locusts were observed in the Kilimanjaro region of Tanzania. In all the affected areas, control efforts are ongoing. Heavy and persistent rainfall was however reported to be affecting control efforts in some areas. The locust outbreaks threatens the 2020/2021 summer cropping harvest as well as irrigated crops and grazing areas, if not effectively controlled. The SADC Secretariat has established a platform to facilitate coordination in control efforts and sharing of information for timely interventions by affected Member States.

Implications for seasonal outcomes

Rainfall has been consistent over much of this season in many parts of the region, and favourable crop conditions have been noted in several countries. The crop production outlook therefore remains favourable over most parts of the region. The good rains experienced over most areas have also positively impacted on livestock, as both grazing conditions and water availability have improved considerably, in contrast to the droughts experienced over the last few years. Despite the generally good picture, some parts of the region are expected to have both crops and forage negatively impacted by drought, in particular parts of Angola, Madagascar and Namibia.

Localized losses of crop production are also expected due to incidents of leaching, waterlogging, and flooding of crops caused by excessive rains noted in several parts of the region. This is expected to negatively impact households and communities in the districts affected. At national and regional level however, the high rainfall is expected to lead to improved crop production overall in several Member States.