

No.7: 2019/20 cropping season

Review for December 1-10, 2019 and Outlook for December 11 - 20, 2019

HIGHLIGHTS

- "Msimu" rains have started in most of unimodal regions and farmers are involved in land preparations and crop planting
- "Vuli" rains continue in most of bimodal areas where farmers are mostly engaged in weeding activities
- Rainfall during December 11-20, 2019 is expected to favour crops development over the bimodal areas and crops establishment over the unimodal areas.
- Farmers and livestock keepers are advised to continue with routinely farming activities and seek professional advice from Agricultural Extension Officers in their localities

SYNOPTIC SUMMARY DURING DECEMBER 1-10, 2019

During this dekad, generally the Azores and Siberian high pressure systems intensified while the St. Helena and Mascarene high pressure systems relaxed. This effect drove the Inter-Tropical Convergence Zone (ITCZ) towards southern hemisphere. The observed warm sea surface temperature (SSTs) over the south west and central Indian ocean led to formation of tropical cyclone 'BELNA' that enhanced weather activities over most parts of the country specifically Lake Victoria basin, western region, south western highlands, north eastern, central and northern coast.

RAINFALL PERFORMANCE DURING DECEMBER 1 - 10, 2019

The weather system contributed to enhanced rain showers over most areas of the country. Significant amount of rainfall ranging from 101 mm to 249 mm was recorded in most areas of Mwanza, Musoma, Shinyanga, Simiyu, Tabora, Mbeya, Katavi, and Kigoma as indicated in Figure 1. However, in some few parts of Tanga received less than 25mm of rainfall as indicated in Figure 1.

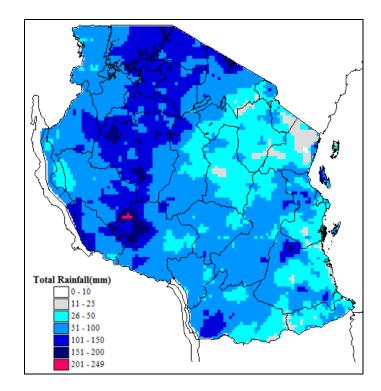


Figure 1: Rainfall total for the period of December 1 - 10, 2019.

AGROMETEOROLOGICAL SUMMARY DURING DECEMBER 1 - 10, 2019

D uring December 1-10, 2019, the major field activity over bimodal regime was weeding of crops while in unimodal regime farmers were mostly engaged with farm preparations and planting .The observed rainfall provided favourable conditions for crops in most places over both unimodal and bimodal areas. Maize and beans crops over much of the bimodal areas were at flowering stage. Soil moisture conditio improved in much of bimodal areas due to ongoing *vuli* rain. For the most parts of unimodal regime, *msimu* rainy season has stated where farmers are mostly engaged in planting activities. However to some parts of southern coast Lindi and Mtwara farmers were at farm preparations. Pastures and water availability for livestock and wildlife were improving over most parts of the country..

HYDROMETEOROLOGICAL CONDITIONS DURING DECEMBER 11-20, 2019

Water levels in dams and river flow discharges have improved mainly in bimodal areas due to ongoing *vuli* rains.

EXPECTED SYNOPTIC CONDITIONS DURING DECEMBER 11-20, 2019

uring this period, generally the Azores and Siberian high pressure systems are expected to continue intensifying while the St. Helena and Mascarene high pressure systems are expected to relax. This will drive the ITCZ towards southern hemisphere. During this period, the Madden Julian Oscillation (MJO) is not expected to be in active phase therefore reducing the chance of enhanced precipitation activities within our country. Sea surface temperatures (SSTs) over central and south west Indian Ocean are still expected to be warmer thus allowing for moisture advection towards our country to cause rainfall activities especially over coastal areas. SSTs over south east Atlantic Ocean (near Angola coast) are expected to be warmer and therefore reduce the moisture influx from congo forest towards our country.

EXPECTED WEATHER CONDITIONS DURING DECEMBER 11 - 20, 2019

n view of the expected weather systems, areas around Lake Victoria basin (Kagera, Geita, Shinyanga, Mwanza, Simiyu and Mara), northern coast (Tanga, northern part of Morogoro, Pwani and Dar es Salaam regions together with isles of Unguja and Pemba), southwestern highlands (Rukwa, Songwe, Mbeya, Njombe and Iringa), southern region (Ruvuma and Southern part of Morogoro) are expected to feature moderate showers over some areas.

Western regions (Kigoma, Katavi and Tabora), northeastern highlands (Arusha, Manyara and Kilimanjaro), central areas (Dodoma and Singida) and southern coast (Mtwara and Lindi) are expected to feature moderate rain showers over few areas.

EXPECTED AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING DECEMBER 11-20, 2019

Soil moisture condition for crop and pasture growth is likely to improve over most areas of the country. Farmers are advised to continue with routinely farm activities while over the unimodal areas farmers are advised to plant when soil moisture is adequate to support seed germination. Farmers, fishers and livestock keepers are advised to consult their relevant extension officers for optimal utilization of this forecast and advisory.

EXPECTED HYDROMETEOROLOGICAL CONDITIONS DURING DECEMBER 11-20, 2019

ater levels in dams and river flow discharges are expected to improve mostly in bimodal areas due to ongoing *Vuli* rainfall season and improve slightly in unimodal areas due to the start of *Msimu* rainfall season. Water users are advised to use available water carefully.