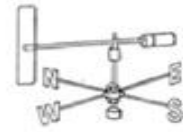




# TANZANIA METEOROLOGICAL AUTHORITY



## AGROMETEOROLOGICAL BULLETIN

No.10: 2023/24 Cropping Season

Review of January 1-10, 2024, and Outlook for January 11-20, 2024

### HIGHLIGHTS

- Crops and pastures are in good condition;
- The expected rainfall in most areas will continue favoring soil moisture improvement for crop growth and development; and
- Farmers and livestock keepers are advised to continue monitoring and take appropriate measures against any negative impacts on crops, crop fields, livestock and pasture.

### SYNOPTIC SUMMARY DURING JANUARY 1-10, 2024

**D**uring this dekad, the southern hemisphere high pressure systems (St. Helena and Mascarenes) relaxed while the northern hemisphere high pressure systems (Azores and Siberian) intensified. This scenario allowed the Inter Tropical Convergence Zone (ITCZ) to continue oscillating over the southern sector of the country.

The slightly warmer than normal Sea Surface Temperatures (SSTs) were observed over the western Indian Ocean while neutral SSTs were observed over the eastern Indian Ocean. This condition influenced the advection of moist maritime wind towards the coastal areas of the country. On the other hand, low-level westerly wind anomaly was observed over the western sector of the country. This condition favoured the advection of humidity from the Congo forests and hence has much substantial contribution to the rainfall-making mechanism over the western areas of our country.

The above weather features resulted in thundershowers over some areas of the southern region, southwestern highlands, entire coast, central, Lake Victoria Basin, and western parts of the country. Moreover, periods of slight to moderate rain showers were observed over the north eastern highlands.

### RAINFALL PERFORMANCE DURING JANUARY 1-10, 2024

**D**uring this dekad, many areas of the country experienced rainy conditions ranging between 11mm to 200mm. However, few areas specifically in Morogoro, Ruvuma, and Pwani regions received more than 200mm of rainfall as indicated in Figure 1.

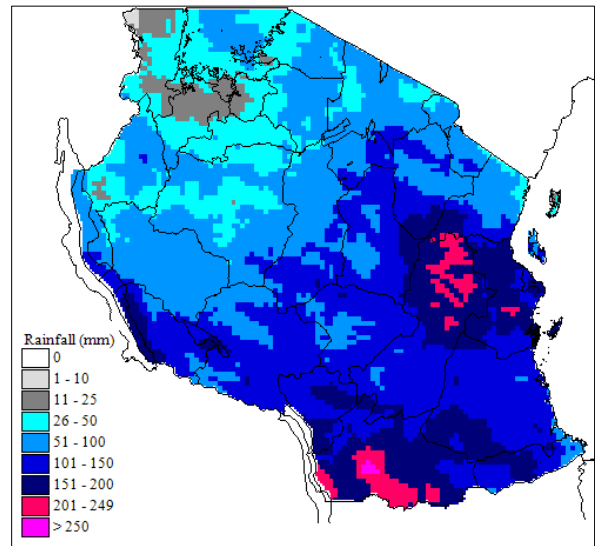


Figure 1: Total dekad rainfall for January 1-10, 2024

### AGROMETEOROLOGICAL SUMMARY DURING JANUARY 1-10, 2024

**D**uring this dekad, rainy conditions experienced in most areas supported crop growth and development.

In most bimodal areas, the maize crop was between wax and full ripeness stages while at the full ripeness stage in the Kagera region.

Over unimodal rainfall areas, maize crops were at the vegetative stages except in Kigoma and Tabora regions where maize crops were between flowering and wax ripeness. Irish potatoes were at the flowering stage in Njombe region and farmers were engaged in fungicide application.

Moreover, in Rukwa, Tabora, Mbeya, Shinyanga, and Morogoro regions farmers were engaged with planting paddy crops.

The availability of water and pasture for livestock and wildlife continued to improve in most areas of the country.

### HYDROMETEOROLOGICAL CONDITIONS DURING JANUARY 1-10, 2024

**W**ater levels in dams and river flow discharges slightly increased in some areas due to prevailing rains.

### EXPECTED SYNOPTIC CONDITIONS DURING JANUARY 11-20, 2024

**D**uring this period, the southern hemisphere high pressure systems are expected to continue relaxing while the northern hemisphere high pressure systems are expected to continue intensifying. This condition is expected to allow the ITCZ to continue oscillating over the southern sector of the country.

The warmer SSTs are expected over the southwest Indian Ocean, this condition is expected to trigger the formation of low-pressure systems in the ocean hence, pulling north-westerly winds over our country thereby enhancing rainfall-making mechanism.

### EXPECTED WEATHER CONDITIONS DURING JANUARY 11-20, 2024

**A**reas around the Lake Victoria Basin (Kagera, Geita, Shinyanga, Mwanza, Simiyu, and Mara regions), the western regions (Kigoma, Katavi, and Tabora regions) are expected to feature thundershowers over some areas.

The southern coast (Mtwara and Lindi regions) is expected to feature thundershowers over most areas.

Northeastern highlands (Arusha, Manyara, and Kilimanjaro regions) are expected to feature rain showers over some areas.

Central areas (Dodoma and Singida regions) are expected to feature rain showers with thunderstorms over a **few** areas.

In the northern coast (Tanga, the northern part of Morogoro, Pwani, and Dar es Salaam region, including the isles of Unguja and Pemba), rain showers with thunderstorms are expected over **some** areas.

The southwestern highlands (Rukwa, Songwe, Mbeya, Njombe, and Iringa regions) and southern regions

(Ruvuma and southern part of Morogoro regions) are expected to feature rain showers with thunderstorms over **most** areas.

### AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING JANUARY 11-20, 2024

**T**he expected rainfall in most areas will likely continue favoring soil moisture improvement that supports crop growth and development. However, the excessive rainy conditions are likely to affect crop growth.

Farmers are advised to continue making follow-ups on crops, and crop fields for management and control of the excessive water, and the outbreak of pests and diseases in consultation with extension officers from their localities.

Livestock keepers are advised to plant more pastures and harvest rainwater for future use.

Fishing communities are advised to strengthen the infrastructure of fish farming and take precautions by continuing to make follow-up on daily weather forecasts, especially for the Indian Ocean and the Great Lakes to make decisions on the right time to go fishing to avoid the effects of strong winds and heavy rains.

### EXPECTED HYDROMETEOROLOGICAL CONDITIONS DURING JANUARY 11-20, 2024

**W**ater levels in dams and river flow discharges are expected to continue increasing due to the expected rainy conditions. The community is advised to continue harvesting rainwater for future use.