# TANZANIA METEOROLOGICAL AGENCY

# DEKADAL WEATHER REVIEW

**No: 23: 2017/18 cropping season** **Review for May 11-20 and Outlook for May 21-31, 2018**

## HIGHLIGHTS

- Dry periods are likely to favor drying, harvesting and storage of maize crop over some parts of unimodal areas.
- The invasion of fall armyworms are expected to threaten food security over affected areas.

## SYNOPTIC SUMMARY DURING MAY 11-20, 2018

The northern high pressure systems (Azores and Siberian) relaxed while the southern high pressure systems (St. Helena and Mascarene) continued to intensify. The position of Inter-Tropical Convergence Zone (ITCZ) shifted towards northern sector of the country. Over the south west Indian Ocean, Sea Surface Temperatures (SSTs) were neutral resulted into less cyclonic activities although there were slightly warmer SSTs along the East African coast which resulted into the low level trough along the coast. The dominant wind flow pattern was southerly to south easterly over the most parts of the country. The southeast Atlantic Ocean (near Angola coast) SSTs was slight warm resulted into weak easterly wind flow over the western parts of the country (Congo Air mass) thereby reducing rainfall activities over the western sector of the country.

## RAINFALL PERFORMANCE DURING MAY 11-20, 2018

During the previous ten days (dekad), most parts of the country received normal to below normal rains, except some parts of Morogoro, Pwani, Dar es salaam, Mtwara and isles of Unguja and Pemba, Mwanza and few parts of Lindi, Dodoma, Ruvuma, Njombe, Iringa, Singida, Arusha, Kilimanjaro, Katavi and Rukwa regions received above normal rains as indicated in Figure 1.

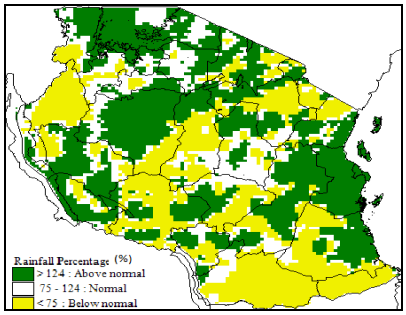


**Figure 1: Percentage of average rainfall for 11-20 May, 2018**

## AGROMETEOROLOGICAL SUMMARY DURING MAY 11-20, 2018

During the period under review, many areas experienced rainfall activities which favored crop growth and development. The unimodal areas specifically Iringa, Mbeya, Njombe and Singida regions, maize crop was reported to be at wax ripeness to full ripeness stages. However, Ruvuma, Dodoma, Rukwa, Kigoma, Tabora and Mtwara regions are in harvesting stage. Meanwhile in Mbeya region planted beans were at pods formation stage.

In bimodal areas specifically Tanga, Pwani, Mara, Kagera, and northern part of Morogoro regions, maize crop was at wax ripeness stage. However, Kizimbani in Zanzibar maize crop was at ninth leaf stage, while Mwanza and Simiyu regions was at harvesting stage. Most parts of the bimodal areas beans were at full ripeness stage while in Bukoba beans crop were at harvesting stage. Paddy was at full ripeness to harvesting stages in Kigoma, Mwanza, Shinyanga, Rukwa and Tabora regions. Cotton was reported at harvesting stage in Mwanza, Kigoma and Shinyanga regions. Fall armyworms were reported to cause damage in maize crop in Arusha(Arumeru district) and Morogoro (Kilosa district). Water and pasture were in good condition over much of the country.

## HYDROLOGICAL CONDITIONS DURING MAY 11-20,2018

Water levels in dams and river flow discharges continued to improve over much of Lake Victoria, Tanganyika, Ruvuma, Wami-Ruvu, Pangani, Rufiji and Rukwa basins due to ongoing seasonal rains.

## EXPECTED SYNOPTIC CONDITIONS DURING MAY 21-31, 2018

The Azores and Siberian highs are expected to relax further while the St. Helena and Mascarene highs are expected to continue intensifying. This is expected to move the ITCZ further north thereby influencing southerly to southeasterly low level winds over the country. SSTs over the southwest Indian Ocean are expected to be slightly warm to neutral which reduces the possibility of occurrence of tropical cyclones. On the other hand Warmer SSTs are expected over the northwest Indian ocean close to the Horn of Africa. The dominant wind flow pattern is expected to be southerly which will enhance cooler temperatures especially over the southern part of the country. The south east Atlantic Ocean (near Angola coast) SSTs is expected to experience neutral to slight warm temperatures which is expected to result into less westerly wind flow, expected to reduce the intensity of precipitation making mechanism over the western sector of the country.

## EXPECTED WEATHER CONDITIONS DURING MAY 21-31, 2018

In view of the expected synoptic conditions, Lake Victoria Basin (Kagera, Geita, Shinyanga, Mwanza, Simiyu and Mara regions) are expected to have showers and thunderstorms over few areas.

Northeastern highlands (Arusha, Manyara and Kilimanjaro regions); Northern coast (Tanga, Northern part of Morogoro, Pwani and Dar es Salaam regions together with isles of Unguja and Pemba) and Southern Coast (Mtwara and Lindi regions) are expected to have Light showers over few areas.

Western regions (Kigoma, Katavi and Tabora regions) and central areas (Dodoma and Singida regions) are expected to have partly cloudy conditions.

Southwestern highlands (Rukwa, Songwe, Mbeya, Njombe and Iringa regions) are expected to have mainly partly cloudy conditions.

## AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING MAY 21- 31, 2018

Soil moisture conditions are expected to continue improving significantly over much of bimodal areas enhancing growth and development of crops. However, excessive soil moisture and water logging are likely to affect nutrient uptake and damage to some crops mainly maize and beans in low land areas particularly in the northern coast. Expected dry conditions are likely to favor crop drying, harvesting and storage particularly in western and southwestern highlands regions. The invasion of fall armyworms in Arumeru and Kilosa district are expected to threaten food security over those areas. farmers are advised to store surplus food to avoid food shortage.

Water and pasture conditions are expected to continue improving significantly across the country. Farmers, fishers and livestock keepers are advised to consult extension officers for optimal use of this forecast and advisory.

## HYDROLOGICAL OUTLOOK AND ADVISORY DURING MAY 21-31, 2018

Water levels in dams and river flow discharges are expected to improve across the country due to expected rains. However, water users are advised to ensure robustness of water harvesting infrastructures to avoid damage due to overflow.

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