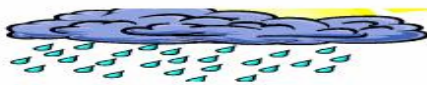




# TANZANIA METEOROLOGICAL AGENCY



## DEKADAL WEATHER REVIEW

No. 26, 2009/10 Cropping Season

May 11-20, 2010

### HIGHLIGHTS

- Over bimodal areas, crops were ranging from advanced vegetative growth stages to early maturity, and in good state.
- Over unimodal rainfall sector most field crops were at full ripeness and harvesting stages, and the state was generally good.

### SYNOPTIC SITUATION

During the 2nd dekad of May 2010, the southern hemisphere high pressure systems (St. Helena and Mascarene) continued to intensify while the Siberian high pressure system and the associated Arabian ridge in the northern hemisphere relaxed and retreated northwards thus causing the rain-making mechanism, the Inter-Tropical Convergence Zone (ITCZ) to move further northwards over East Africa. The zonal component of the ITCZ retreated dramatically to the northern hemisphere. The East African Ridge over the country continued to intensify resulting into diffluent flow pattern thus suppressing rainfall development over the region.

### RAINFALL SUMMARY

During the period under review, much of the country was generally dry except for a few localized areas over northern coast and Lake Victoria Basin that experienced rainfall above 50 mm in a dekad. Bukoba station was leading by 107.0 mm of rainfall followed by Pemba 53.5 mm, and Amani 44.9 mm as indicated in Figure 1. Other stations recorded less than 20 mm with much of unimodal areas remaining seasonably dry, while over bimodal areas the dryness signifies pre mature end of *Masika* rains.

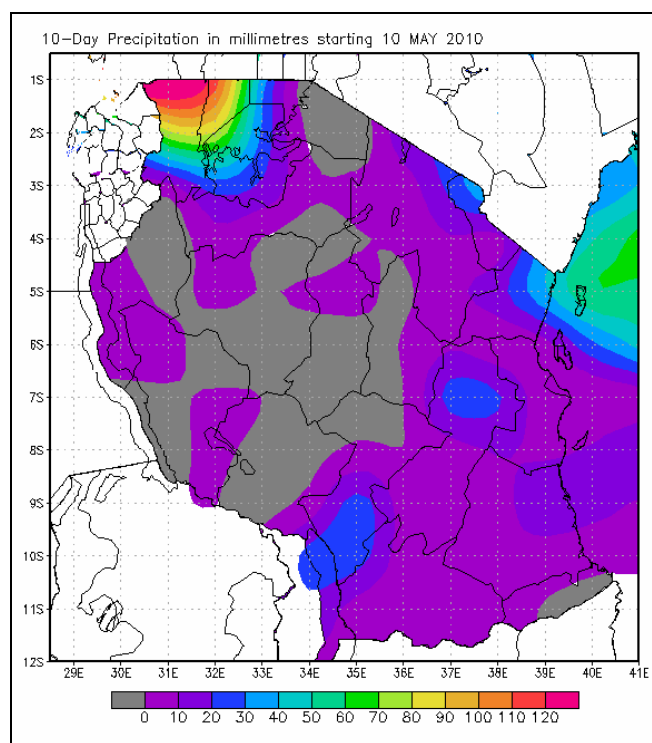


Figure 1: May 10-20, 2010 Rainfall Distribution

### IMPACT ASSESSMENT

#### Agrometeorological and Crop Summary

During the second dekad of May 2010 crops mainly maize, paddy and beans over most areas of bimodal rainfall pattern had reached stages ranging from vegetative to wax ripeness stage. Crops were

generally in good state as observed mainly over most areas of northeastern highlands despite the extensive dry spell they experienced during the period particularly over some lowland areas of Hai and Same districts as well as parts of northern coast (Tanga and Coast regions), raising fear to the farmers. Likewise, over unimodal areas most crops particularly maize, beans, paddy, sunflower, sorghum and millet were generally in moderate to good state ranging from vegetative to harvesting stage. The second phase planted beans crop was progressing well at flowering to near ripeness stage and in good state. Paddy crop was in moderate state from flowering to harvesting stages, while wheat crop mainly over Mbeya region was at between third-leaf to shooting stage, and was progressing well. A few areas like Ismani in Iringa (north) experienced poor crop performance due to an early cessation of rains.

#### **Hydro-meteorological Summary**

Water levels in lakes, dams and river flows were maintained during the period, thus water availability for human and industrial use and energy generation purposes has improved.

#### **Environmental Summary**

Cool temperatures over most areas in the country have led to comfortable conditions at night although some areas had local variations of high temperatures.

#### **EXPECTED SYNOPTIC SYSTEMS DURING MAY 21-31, 2010**

For the coming dekad, the southern hemisphere high pressure systems (the Mascarene and St. Helena together with the associated East African ridge) are expected to continue intensifying while the Azores and Siberian high pressure systems together with the Arabian

ridge in the northern hemisphere are likely to relax allowing the zonal component of the ITCZ to continue moving further northwards.

Generally a southeasterly to southerly wind flow pattern from the Indian Ocean is expected to prevail, carrying cold air mass from southern hemisphere (where autumn is being experienced at this time of the year) resulting into night chilly weather over most parts of southern and coastal regions. This southerly wind flow is expected to be in phase with east-ward propagating troughs over the southern tip of Africa causing a drop in temperatures.

#### **EXPECTED WEATHER SITUATION DURING MAY 21-31, 2010**

Lake Victoria Basin (Kagera, Shinyanga, Mara and Mwanza regions) is likely to experience normal rainfall. Northern coast and hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions together with the Islands of Unguja and Pemba) are expected to experience normal rainfall with a decreasing trend. However isolated events of moderate rainfall are also expected. Southern Coast (Mtwara and Lindi regions): Most areas are expected to experience mainly dry conditions with a few showers. Northeastern highlands (Arusha, Kilimanjaro and Manyara regions) are expected to experience normal rainfall with a decreasing trend. Southwestern highlands (Rukwa, Mbeya and Iringa regions) are expected to experience reduced night temperatures associated with chilly weather mainly over high grounds. Southern region (Ruvuma region) and part of Ulanga district are expected to experience occasional light rains. Western areas (Tabora and Kigoma regions) are expected to feature mainly dry conditions. However, northern Kigoma is likely to experience occasional showers. Central (Dodoma and Singida regions) are expected to feature mainly dry conditions. Relatively low temperatures are likely during night and early morning hours. Occasionally windy conditions are likely to prevail.

Prepared by

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