



## DEKADAL WEATHER REVIEW

No: 22 Cropping Season 2010/11

April 1-10, 2011

### HIGHLIGHTS

Soil moisture levels during the dekad favored field crops at early vegetative stage in bimodal sector and at advanced vegetative to maturity stages in unimodal areas.

### SYNOPTIC SITUATION

During the first dekad of April 2011, the northern hemisphere high pressure cells, the Azores and Siberian High and its associated Arabian ridge continue to relax thus allowing the zonal arm of the Inter-tropical Convergence Zone (ITCZ) to migrate northwards over Tanzania. The southern hemisphere high pressure cells, St. Helena and Mascarene anticyclones intensified pushing northward the rain making mechanism (ITCZ). The meridional arm of ITCZ was much active over western parts of Tanzania.

### RAINFALL SUMMARY

Most areas of the country continued to receive rainfall during the dekad although in a falling trend. The highest value was obtained at Tukuyu 149.0mm followed by Mahenge 143.4mm, Bukoba 143.2mm, Kilwa Masoko 121.9mm, Igeri 120.9mm, Mtwara 87.3mm, Morogoro 80.7mm, Mbozi 79.9mm, Pemba 79.7mm, Mbeya 77.1mm, Babati 76.4mm, Moshi 74.8mm, Sumbawanga 71.9mm, Musoma 71.8mm, Tanga 69.6mm, Iringa 65.8mm, Uyole 60.1mm, Lyamungu 59.1mm, Same 56.5mm, and Kibondo 51.1mm. A few areas mainly over the central areas of the country recorded rainfall below 30 mm as shown in Figure 1.

Most parts of bimodal areas (northern coast, northeastern highlands, and Lake Victoria basin)

were generally wet implying continuation of the long rains (*Masika*) in those areas.

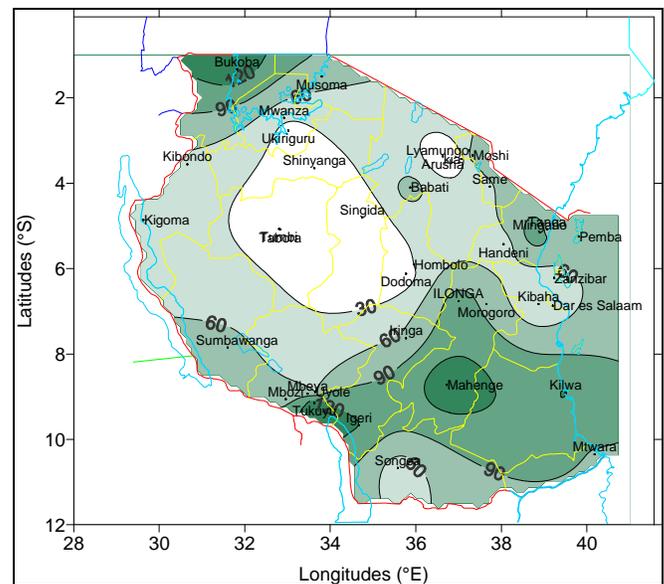


Fig. 1: April 1-10, 2011 Rainfall distribution (mm)

### Agrometeorological and Crop Summary

Soil moisture levels during the dekad favored field crops which mostly were at early vegetative stage as observed over the bimodal sector, while in the unimodal sector crop stages ranged between mid vegetative to harvesting. In the unimodal sector crop stages ranged from late vegetative to maturity as reported from Morogoro south (Ilonga and Ifakara areas), Katavi region (Mpanda area), southern (Ruvuma region) and central parts (Dodoma and Singida regions) where maize crop was generally at ripeness and paddy at milk stage, while beans crop over some parts of Mbeya region was in the preparations for second planting after the

first crop moderate to good harvest got completed. Areas that experienced prolonged poor soil moisture supply in unimodal sector prompted farmers to opt for short term variety crops including sweet potatoes, peas, and cassava, as reported from Meatu and Maswa districts (Shinyanga region), Kondo district (Dodoma region), while over Ismani and Usangu areas in Iringa and Mbeya regions of southwestern highlands the observed soil moisture deficit acutely impeded field crops during the season.

Pastures and water availability for livestock and wildlife has improved over much of the country mainly northeastern highlands as a result of *Masika* rains.

### Hydro-meteorological Summary

Water levels in lakes, dams and river flows have regained fairly well due to substantial rainfall amounts obtained, but water for human and industrial usage and hydro-power generation should still be used sparingly.

### Environmental Summary

Temperatures over most areas in the country were generally high but on a decreasing trend.

## EXPECTED SYNOPTIC SYSTEMS DURING APRIL 11-20, 2011

The southern hemisphere systems the St. Helena and Mascarene highs are expected to be strong, pushing northwards the ITCZ. In the northern hemisphere, the Azores high is expected to relax. The Siberian high and the associated Arabian ridge are expected to relax. The meridional arm of ITCZ is expected to be active mainly over the Congo basin due to warming over the southwestern coast of Africa and occasionally oscillate eastwards towards western part of Tanzania. The zonal arm of

ITCZ is expected to be more active over the country signifying the active phase of the ITCZ thus supporting enhanced rainfall over the country.

## EXPECTED SYNOPTIC SYSTEMS DURING APRIL 11-20, 2011

Lake Victoria Basin (Kagera, Mara, Shinyanga and Mwanza regions): Moderate rainfall is expected mainly over Mwanza and Mara. Kagera and Shinyanga regions will experience less rainfall during the dekad. Western region (Tabora and Kigoma regions): Moderate to heavy showers and thunderstorms are expected mainly over Kigoma region. Northern coast and its hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions, Isles of Unguja and Pemba Islands): enhanced rainfall is expected mainly over Morogoro and along the coastal belt occasionally spreading to the Isles of Unguja and Pemba. Southern Coast (Mtwara and Lindi regions): Moderate to heavy showers and thundershowers are expected. North-eastern Highlands (Arusha, Kilimanjaro and Manyara regions): Isolated rain-showers are expected and likely to be moderate at times. However, rainfall in this area is likely to be poorly distributed during the dekad. Southwestern highlands (Rukwa, Mbeya and Iringa regions and southern Morogoro (Mahenge areas): Enhanced rainfall is expected over Mbeya, Southern Morogoro and western parts of Rukwa, while other areas are likely to experience decreasing rainfall towards the end of the dekad. Southern region (Ruvuma region): Moderate showers are expected with a decreasing trend towards the end of the dekad. Central Region (Dodoma and Singida regions): Less rainfall is expected over Singida while significant rainfall is expected over Dodoma during the first half of the dekad.

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