# TANZANIA METEOROLOGICAL AGENCY

# DEKADAL WEATHER REVIEW

No. 22 2007/08 Cropping Season April 1-10, 2008

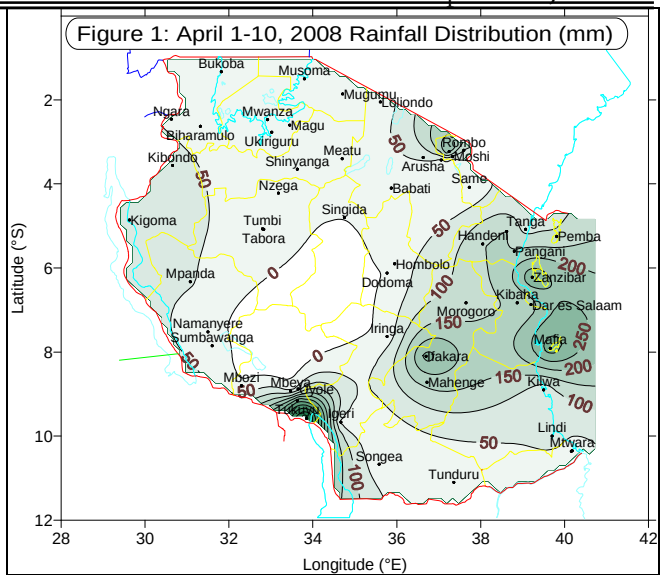
## SYNOPTIC SITUATION

During April 1 – 10, the southern hemisphere systems (St. Helena and Mascarene anticyclones) continued to intensify extending a ridge towards the southern parts of Tanzania. The Azores and Siberian anticyclones in the northern hemisphere continued to relax with short episodes of intensification. The above configuration allowed the zonal arm of the Inter-Tropical Convergence Zone (ITCZ) to remain over the country. Persistent convergence between southeasterly and easterly moist air-masses and enhanced phase of easterly waves from the Indian Ocean increased rainfall activities over much of the country.

## RAINFALL SUMMARY

During April 1-10, rainfall activities were mainly concentrated over eastern sector of the country (Coastal belt and hinterlands) and few pockets of southwestern highlands where reported 10-day rainfall amounts recorded over much of the stations exceeded 100 mm as shown in Fig. 1. However, little or no rainfall (areas under 50 mm isohyet) was recorded over Lake Victoria basin, northeastern highlands, central, southwestern highlands, and southern regions. The highest recorded rainfall amount for the period was obtained at Kyela station 607.5 mm, followed by Tukuyu 335.5 mm, Mafia 332.7 mm, Zanzibar 295.9 mm, Lyamungo 272.1 mm, and Ifakara 271.2 mm. Some stations reported rainfall between 100 mm and 200 mm; Dar es Salaam 177.4 mm, Mahenge 164.9 mm, Tanga (Pangani and Marikitanda about 150 mm), Kibaha 149 mm, Handeni 147.7 mm, Morogoro 112.2 mm, and Pemba 109.6 mm.

Figure 1: April 1-10, 2008 Rainfall Distribution (mm)




## IMPACT ASSESSMENT

### Agrometeorological and Crop Summary

Soil moisture supply during the dekad was generally adequate as observed almost across the country with some areas over the eastern part, southeastern highlands and around Mt Kilimanjaro experiencing excessive soil moisture conditions. Brief low soil moisture supply over central and most areas of southwestern highlands was conducive for development of maize that was between near ripeness and ripeness stages with moderate to good state. Following late onset of *Masika* rains, crops over bimodal rainfall areas were at early vegetative growth stages and farmers were largely involved in weeding although excessive soil moisture supply as reported from several parts of northern coast (Pwani, Dar es Salaam, and Tanga regions), and over Moshi district in the northeastern highlands impeded some farming operations.

The second planted beans crop was at early vegetative growth stage over several parts in southwestern highlands, western and Lake Victoria basin. Over Monduli district (Arusha region), Loliondo district (Manyara region) and Magu district (Mwanza region) crops such as maize, sorghum and paddy were at various stages between post-emergence and tasselling in good state except over Magu where crop condition for the period was moderate following persistent insufficient soil moisture supply obtained during two consecutive dekads. Floods were reported over Kyela district (Mbeya region), Ifakara (Morogoro region) along Kilombero River, and Moshi district where some field crops were destroyed.

Market supply for cassava over several areas of the country continued fairly well.

Pasture conditions and water availability for livestock and wildlife were generally good across the country and are improving over the lowlands of the northeastern highlands following the ongoing long rains (Masika).

### Hydrometeorological Summary

Water levels in lakes and dams are rising as well as river discharges as a result of the ongoing seasonal and Masika rains.

### Environmental Summary

Temperatures were moderate over most parts of the country due to increased cloud cover and wet conditions.

## EXPECTED SYNOPTIC SYSTEMS DURING APRIL 11–20, 2008

During this dekad, the southern hemisphere systems (St. Helena and the Mascarene anticyclones) are expected to continue intensifying, whereas the Azores and Siberian anticyclones in the northern hemisphere are expected to remain relaxed thus allowing both the meridional and zonal components of the ITCZ to be active over the country. Easterly to southeasterly wind regime is expected to maintain adequate moisture influx from the Indian Ocean to the coastal areas of the country extending to the interior at various intervals. The extension of the East African ridge towards central parts of the country is expected to reduce rainfall activities over those areas.

## EXPECTED WEATHER DURING APRIL 11–20, 2008

Northern coast (Dar es Salaam, Pwani, Morogoro, Tanga together with Islands of Zanzibar and Pemba) are expected to feature partly cloudy to cloudy conditions with thundery showers over most areas. Northeastern highlands (Arusha, Kilimanjaro and Manyara regions) are expected to feature partly cloudy conditions with thundery showers over some areas. The Lake Victoria Basin (Kagera, Mwanza, Shinyanga and Mara regions) together with western areas (Kigoma and Tabora regions) are expected to feature cloudy to partly cloudy conditions with thundery showers over some areas. Southwestern highlands (Mbeya, Iringa and Rukwa regions) and central (Dodoma and Singida regions) are expected to feature partly cloudy conditions with isolated showers and thunderstorms. Southern regions (Ruvuma and Mahenge) and southern coast (Mtwara and Lindi regions) are expected to feature partly cloudy conditions with rainshowers and thunderstorms over few areas.

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