



TANZANIA METEOROLOGICAL AGENCY



DEKADAL WEATHER REVIEW

No: 21 Cropping Season 2010/11

March 21-31, 2011

HIGHLIGHTS

Continued soil moisture improvement was observed over most parts of the country enhancing field activities and crop growth and development over unimodal areas.

SYNOPTIC SITUATION

During the third dekad of March 2011, the northern hemisphere high pressure cells, the Azores and Siberian highs and the associated Arabian ridge relaxed 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 resulting in a northward shift of the rain making mechanism (ITCZ). The meridional arm of ITCZ shifted slightly eastwards over parts of DRC.

RAINFALL SUMMARY

Most areas of the country during the dekad continued to experience substantial amounts of rainfall with the highest values recorded at Mahenge 230.0 mm, followed by Musoma 174.5 mm, Songea 158.3 mm, Kizimbani 150.2 mm, Kibaha 126.2 mm, Matangatuani 126.0 mm, Hombolo 123.4 mm, Ilonga 119.1mm, Bukoba 111.0 mm, Igeri 114.8 mm, Tumbi 103.1 mm, Mlingano 101.7 mm, Mtwara 100.5 mm, Tabora 95.4 mm, Mbimba 95.3 mm, Tanga 92.7 mm, Hombolo 93.4 mm, Tukuyu 90.5 mm, Ukiriguru 84.7mm, Morogoro 74.0 mm, Kibondo 66.6 mm, Lyamungu 58.9 mm, Mwanza 58.0 mm, Sumbawanga 56.7 mm, Iringa 53.0 mm and Moshi 50.6 mm. The rest of the sample stations recoded rainfall below 50 mm as shown in Figure 1.

On the other hand most parts of bimodal areas (northern coast, northeastern highlands, and Lake Victoria basin) were generally wet implying onset of the long rains (*Masika*) in those areas.

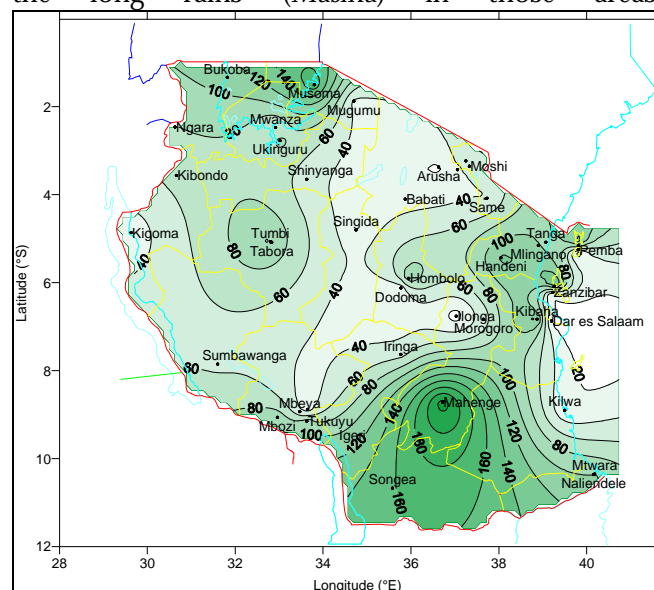


Fig. 1: March 21-31, 2011 Rainfall distribution (mm)

Agrometeorological and Crop Summary

Continued soil moisture improvements were observed over most parts of the country enhancing field activities and crop growth and development. Several areas over the Lake Victoria basin, northern coast and parts of coast region including east of Morogoro region have enjoyed a timely onset of *Masika* rains.

Likewise, over unimodal areas field crops mostly maize, beans, and paddy were progressing well at stages ranging from vegetative as over Morogoro south (Ilonga and Ifakara areas) to maturity stage as reported particularly in 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, both are rated as moderate to good state.

A few areas in unimodal sector experienced prolonged poor soil moisture supply which prompted farmers to opt for short term variety crops including sweet potatoes, peas, and cassava, as reported from Meatu and Maswa districts (Shinyanga region), Kondoa district (Dodoma region), while over Ismani area in Iringa region (southwestern highlands) observed soil moisture deficit that impeded field crops mainly maize during the season.

Pastures and water availability is expected to improve over much of the country mainly northeastern highlands as a result of *Masika* rains reported in the region during the period under review.

Hydro-meteorological Summary

Water levels in lakes, dams, and rivers in the country have improved slightly following ongoing *Msimu* and *Masika* rains. However, water for human and industrial usage and hydropower generation should be used sparingly.

Environmental Summary

Temperatures over most areas in the country were generally hot coupled with high humidity leading to uncomfortable conditions, but it is expected to start declining in the coming dekad.

EXPECTED SYNOPTIC SYSTEMS DURING APRIL 1-10, 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 Congo basin due to warming over 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 1-10, 2011

Lake Victoria Basin (Kagera, Mara, Shinyanga, and Mwanza regions): Moderate to heavy rainfall is expected mainly over Mwanza and Mara occasionally including Kagera region. Shinyanga region will experience a few showers and thunderstorms during the dekad. Western region (Tabora and Kigoma regions): Moderate to heavy showers and thunderstorms are expected. Northern coast and its hinterland (Dar es Salaam, Morogoro, Tanga, and Coastal regions, and Unguja and Pemba Islands): enhanced rainfall is expected mainly along the coastal belt and the Isles occasionally spreading to Morogoro and Tanga regions. Southern Coast (Mtwara and Lindi regions): Moderate to heavy showers and thundery showers are expected. Northeastern highlands (Arusha, Kilimanjaro, and Manyara regions): Isolated rainshowers are expected and likely to be moderate at times. Southwestern highlands (Rukwa, Mbeya and Iringa regions, and southern Morogoro (Mahenge areas): Thundery showers are likely during the dekad. Enhanced rainfall is expected over Mbeya, southern Morogoro and eastern parts of Iringa. Southern region (Ruvuma region): Moderate showers are expected during the dekad. Central region (Dodoma and Singida regions): Isolated rain showers and thunderstorms are expected.

Prepared by

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