

#### No: 15. 2013/14 Cropping Season

January 21-31, 2014

#### HIGHLIGHT

Improvement soil moisture conditions experienced during January 21-31, 2014 over the unimodal areas was favorable for crop development and late planting. Timely weeding is therefore recommended to salvage soil moisture available for crops.

#### SYNOPTIC SUMMARY

During the third dekad of January 2014, the northern hemisphere high pressure systems (the Azores and Siberian) continued strengthening while the southern hemisphere pressure systems (the St. Helena and Mascarene) high pressure systems relaxed significantly. This setting made the Inter-Tropical Convergence Zone (ITCZ) to maintain its position farther extreme parts of the country. The meridional arm of ITCZ continued to influence weather in the western sector of the country. Low level convergence wind flow was maintained throughout the period over the Lake Victoria basin, western, central, southwestern highlands and southern areas of the country. Less moist and strong north easterly to weak easterly winds were favored to reach northeastern highlands, coastal regions and the hinterlands. Periods of low level strong winds and rough Seas were favored along the coastal zone.

# WEATHER SUMMARY

With the observed synoptic conditions, the country experienced seasonal rainfall mostly over the unimodal areas, with a few areas of the bimodal areas particularly Bukoba, Babati and parts of Mwanza recording significant amounts of rainfall (see Figure 1).

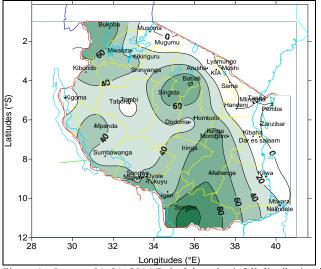


Figure 1: January 21–31, 2014 Dekadal total rainfall distribution in millimeters.

The highest amount of rainfall during the dekad was recorded at Songea (110.0 mm), followed by Babati (83.1 mm), Mbeya (82.8 mm), Mahenge (79.4 mm), Bukoba (78.9 mm), Singida (74.2 mm), Ilonga (73.1 mm), Tukuyu (71.2), Mbozi (64.7 mm), Iringa (60.2 mm), Kibondo (56.8 mm) and Mpanda (55.7 mm). The remaining stations recorded dekadal total rainfall below 50 mm.

#### IMPACT ASSESSMENT

### **Agrometeorological and Crop Summary**

uring the period under review, the rainfall experienced over the unimodal areas led to significant improvement of soil moisture mainly over Mtwara, southern Morogoro, Singida, Iringa, Mbeya, Mpanda and northern Kigoma. The acquired soil moisture was favorable for field activities ranging from planting to weeding. Crops in these areas were mainly at emergence and establishment stages, while planting and weeding activities carried out in few areas, except for Kigoma region where maize crop was at tasseling stage. Crops over the unimodal areas were in general good state. Heavy rainfall associated with hailstones that damaging maize and banana crops was reported in Kibondo district. Over the bimodal areas, maize and beans crops have reached full ripeness stage. However, the cessation of vuli rains during the period led to decreased soil moisture condition in many parts of the bimodal areas, except for some few places particularly Bukoba and Babati in Kagera and Manyara regions respectively. The reported soil moisture stress led to wilting of late planted maize and bean crops in some areas including Tanga, Kilimanjaro, Coast, Mara and Shinyanga regions. A case of flooding was reported in Morogoro and Dodoma regions causing water lodging conditions and destruction of cropped fields, roads and other infrastructures over Kilosa and Mvomero districts in Morogoro region and Gairo district in Dodoma. Pastures and water availability for livestock and wildlife have improved over much of the country especially in unimodal areas.

#### **Hydrological Summary**

Water levels in dams and river-flows have decreased over most parts of bimodal areas due to poor *vuli* rains, while significant improvements was reported mainly over unimodal areas of the country.

#### **Environmental Summary**

During the period of 21-31, January 2014 warmer temperature conditions prevailed over much of the country.

# EXPECTED SYNOPTIC CONDITIONS DURING FEBRUARY 1-10, 2014

During the first dekad of January 2014, pressure systems over the northern hemisphere are expected to continue intensifying while the pressure systems in the southern hemisphere are expected to relax further. On the other hand, the expected continuation of the neutral to cool Sea Surface Temperatures (SSTs) in West Indian Ocean off Tanzanian coast will continue to contribute on drier northeasterly wind flow over the coast. Low level northerly wind is expected to dominate over the Lake Victoria basin, while low level wind convergence is expected to dominate over the western, southwestern, central, southern and southwestern highlands areas of the country. Slight warming SSTs is expected to be observed over Atlantic Ocean closer to Angola coast. This configuration is anticipated to cause easterly wind anomalies which will be in phase with the slight retreat of the meridional arm of ITCZ west wards.

# EXPECTED WEATHER DURING FEBRUARY 1-10, 2014

LakeVictoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Isolated thunderstorms and showers are expected over few areas. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba): Light rains are expected over few areas mainly over the Islands. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Mainly dry conditions are expected. Western regions (Kigoma, Rukwa and Tabora regions): Frequent thundershowers are expected. Central areas (Dodoma and Singida regions): Rain showers and isolated thunderstorms are expected. Southwestern highlands (southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): Rain showers with isolated thunderstorms are expected. Southern Coast (Mtwara and Lindi regions): Rain showers and thunderstorms are expected over few areas. Southern region (Ruvuma region): Rain showers and thunderstorms are expected.

# AGROMETEOROLOGICAL OUTLOOK DURING FEBRUARY 1-10, 2014

D uring the period of February 1-10, 2014, the expected rainfall over the unimodal areas is expected to provide favorable soil moisture for farm activities ranging from planting, weeding and fertilizer application. Timely weeding is therefore recommended to salvage soil moisture available for crops. Prevailing dry conditions over much of bimodal areas is favorable for land preparation for *Masika* crop. Farmers are advised to seek professional advice from their agriculture extension officers.

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