

DEKADAL WEATHER REVIEW

No: 18. 2013/14 Cropping Season

February 21-28, 2014

HIGHLIGHT

- Rainfall experienced during February 21-28, 2014 over the unimodal areas was favorable for crop and pasture development.
- Farmers over the bimodal areas are advised to finalize land preparations and acquisition of farm inputs to be ready for *Masika* cropping season.

SYNOPTIC SUMMARY

During 21-28 February 2014, the high pressure systems over the northern hemisphere intensified significantly, while in the southern hemisphere the St. Hellena high pressure system intensified slightly and the Mascarene high pressure system relaxed slightly. On the other hand, the meridional arm of ITCZ stayed over the extreme west throughout the period. Neutral to warm sea surface temperatures in South West Indian Ocean influenced the development of low pressure systems and a tropical storm in the area. Low level easterly to north-easterly winds dominated much of the country.

WEATHER SUMMARY

With the observed synoptic condition, the country experienced mainly seasonal rainfall over the unimodal areas but the bimodal areas remained seasonally dry. As shown in Figure 1, the highest amount of rainfall during the dekad was recorded at Songea (95.4 mm), followed by Igeri (81.0 mm), Tukuyu (71.2 mm), Mbeya (69.3mm) and Mahenge (57.6 mm). The remaining stations recorded dekad total rainfall below 50 mm. Figure 2 also shows rainfall performance during the dekad as percentages of long term average obtained from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network, whereby most areas of over the unimodal areas (except southern coast, central and western regions) experienced above normal rainfall.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the period under review, the unimodal areas continued to experience seasonal rainfall with good soil moisture, except a

few places like central areas where dry conditions were observed throughout the dekad. The soil moisture experienced during the period was favourable for crop growth and development over much of the unimodal areas. Maize crops over the western regions were reported to be between flowering and waxy ripeness while over central regions maize crops were between ninth leaf and tasseling. Over Southern coast and southern region, maize crops were mostly at flowering stage while over south-western highlands crops were reported to be between ninth leaf and tasseling. Generally, crops were reported in good state except over Mbeya region where maize crops were affected by excessive soil moisture conditions. Over the bimodal areas, seasonal dry conditions prevailed over much of the region during the period. The observed seasonal dry conditions were favourable for land preparations for *masika* season. Pastures and water availability for livestock and wildlife have improved over much of the country especially in unimodal areas.

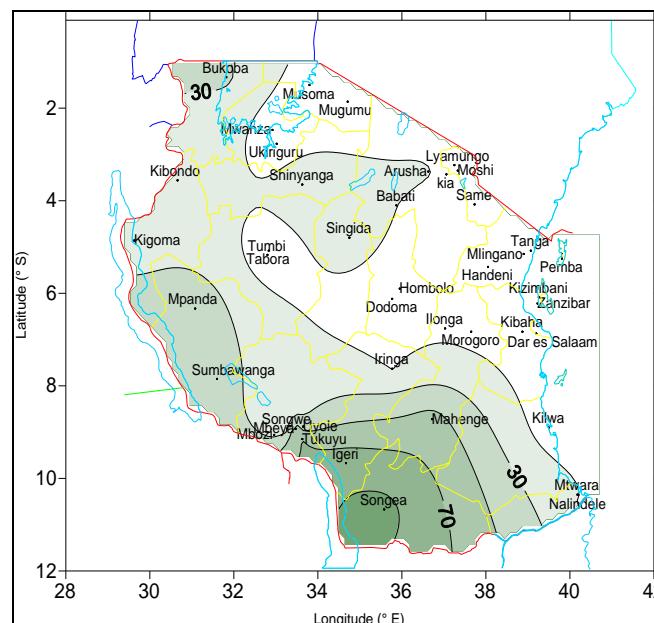


Figure 1: February 21–28, 2014 dekadal total rainfall distribution in millimeters.

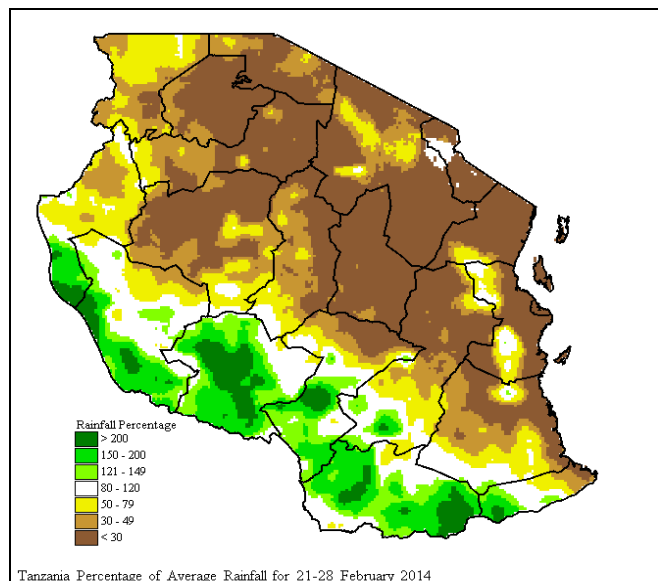


Figure 2: Rainfall performance during February 21–28, 2014 as percentage of the long term average rainfall (mm)

Hydrological Summary

Water levels in dams and river flows continued to improve over some parts of the country, mainly over the unimodal areas.

Environmental Summary

During the period of 21-28, February 2014 warmer temperature conditions prevailed over much of the country.

**EXPECTED WEATHER
DURING MARCH 1-10, 2014**

Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Few rains and thunderstorms are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba): Few rains are expected. North Eastern Highlands (Kilimanjaro, Arusha and Manyara regions): Mainly dry conditions are expected but with few rains. Western regions (Kigoma, Rukwa and Tabora regions): Frequent thundershowers are expected. Central areas (Dodoma and Singida regions): Mainly dry conditions are expected. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region), southern Coast (Mtwara and Lindi regions) and southern region (Ruvuma region): Occasional rains and thunderstorms, especially towards the end of the period, are expected.

**AGROMETEOROLOGICAL OUTLOOK
DURING MARCH 1-10, 2014**

During the period of March 1-10, 2014, the expected rainfall over the unimodal areas will be favorable for crops and pasture development. Where frequent rains and thundery showers are predicted (particularly over the western regions), farmers are advised to take precautionary measures for their safety as well as farms against soil erosion and leaching of nutrients. However, the reduced rainfall expected particularly over the central regions may affect development of maize crops. Timely weeding is therefore recommended to salvage soil moisture and nutrients available for crops. Over the bimodal areas, the predicted few rains will be useful for finalizing land preparations for the *Masika* season. Farmers over the bimodal areas are advised to finalize land preparation and acquisition of farm inputs to be ready for *Masika* cropping season. Farmers are also advised to seek professional advice from their extension officers.

**EXPECTED SYNOPTIC CONDITIONS
DURING MARCH 1-10, 2014**

During the first dekad of March 2014, the high pressure systems in the northern hemisphere are expected to relax significantly while the ones in the southern hemisphere are expected to intensify. This configuration is expected to cause the ITCZ to retreat towards the southern parts of the country, influencing activities over there. On the other hand, the meridional arm of ITCZ is expected to stay over the extreme west of the country towards eastern Congo basin. Neutral to warm sea surface temperatures in South West Indian Ocean, east of Madagascar, are likely to weaken the expected easterlies and therefore suppress activities especially over the coastal areas.

Prepared by

TANZANIA METEOROLOGICAL AGENCY

3rd, 4th & 10th Floors - Ubungu Plaza – Morogoro Road.

P.O. Box 3056 Tel. 255 -(0) 22 – 2460706-8 ; Fax: 255 - (0) 22 – 2460718 E-mail: (1) met@meteo.go.tz (2) agromet1_tz@meteo.go.tz

Dar es Salaam UNITED REPUBLIC OF TANZANIA