TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 13. 2013/14 Cropping Season **January 1-10, 2014**

HIGHLIGHTS

- Late planted crops over the bimodal areas experienced wilting conditions during the dekad due to prolonged soil moisture deficit.
- Improved soil moisture expected over the unimodal areas during January 11-20, 2014 is favorable for crop establishment as well as crop and pasture development.

SYNOPTIC SUMMARY

During the first dekad of January 2014, the northern hemisphere high pressure systems (the Azores high and Siberian high), continued strengthening significantly while the southern hemisphere high pressure systems (St. Helena high and Mascarine high) continued relaxing. This setting generally made the Inter–Tropical Convergence Zone (ITCZ) to cover most of the south-western and southern parts of the country. The meridional arm of ITCZ slightly retreated west-wards and covered the western sector of the country. In terms of wind flow, low level convergence was maintained over the Lake Victoria basin, western, central and south-western highland areas of the country throughout the period. Less moist north easterly to easterly winds were favored to reach north-eastern high lands and coastal regions of the country and the hinterland.

WEATHER SUMMARY

In view of the observed synoptic and weather conditions, the country experienced rainfall mostly over the unimodal areas, while a few areas of north-eastern highlands and the coastal belt experienced light rain showers associated with strong winds. The highest amount of rainfall during the dekad was recorded at Songea (153.2 mm), followed by Igeri (125.5 mm), Kibondo (114.0 mm), Dodoma (95.0 mm), Singida (91.2 mm), Mpanda (57.9 mm) and Hombolo (50.7mm). The remaining stations recorded dekadal total rainfall far below 50mm as depicted in Figure 1.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the first dekad of January, 2014, soil moisture improvement was observed over the unimodal areas whereas over the bimodal areas the moisture was experienced at inadequate levels. The adequate soil moisture in unimodal areas was observed in most parts including west, central and southwestern highlands particularly Kigoma, Singida, Dodoma, Iringa, Mbeya and Ruvuma regions. Crops in these areas were mainly at emergence and establishment stages, with some planting activities carried out in few areas, except for Kigoma region where maize crop was at ninth leaf stage and in general good state. Over the bimodal sector, maize crop in most areas reached full ripeness stage. However, the decreased soil moisture condition was observed in most parts of the sector, except in some few places particularly of Lake Victoria basin. The observed soil moisture deficit led to wilting of late planted crops in some areas including Mara, Shinyanga, Tanga, Morogoro, Kilimanjaro, Coast and Manyara regions. A case of hailstone was reported from Mara region affecting cotton crops. Pastures and water availability for livestock and wildlife have improved over much of the country.

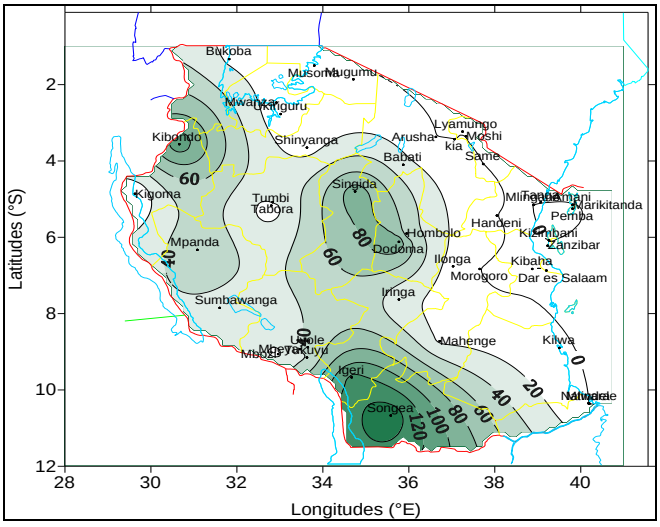

Figure 1: **January 1–10, 2014 total rainfall distribution in millimeters.**

Hydrological Summary

Water levels in dams and river-flows improved significantly over most parts mainly of unimodal sector of the country.

Environmental Summary

During the period warmer temperature conditions prevailed over much of the country.

EXPECTED SYNOPTIC CONDITIONS DURING JANUARY 11-20, 2014

During the second dekad of January, 2014 pressure systems over the northern hemisphere are expected to intensify significantly while their counterparts in the southern hemisphere are expected to relax further. On the other hand, the expected neutral sea surface temperatures in West Indian Ocean off Tanzanian coast will contribute to drier north-easterly flow over the coast. Low level wind convergence is expected to dominate over the Lake Victoria basin, Western, Southern, Central and South-western highlands. Slight warming of SSTs is expected to be observed over Atlantic Ocean closer to Angola coast. This configuration is anticipated to cause zonal arm of ITCZ to move extreme south of its limit in the southern hemisphere and retreat of the Meridional arm of ITCZ slightly west wards.

EXPECTED WEATHER DURING JANUARY 11-20, 2014

Lake Victoria basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Isolated thunderstorms and showers over few areas are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the Isles of Unguja and Pemba): Showers over few areas and periods of strong winds over coastal belt are expected. North eastern highlands (Kilimanjaro, Arusha and Manyara regions): Showers are expected over few areas. Western regions (Rukwa and Tabora regions, and southern parts of Kigoma region): Frequent thundershowers are expected. Central areas (Dodoma and Singida regions): Rain showers and isolated thunderstorms are expected. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): Rain showers with thunderstorms are expected. Southern coast (Mtwara and Lindi regions): Rain showers and isolated thunderstorms over few areas, and periods of strong winds are expected. Southern region (Ruvuma region): Rain showers and thunderstorms are expected.

AGROMETEOROLOGICAL OUTLOOK DURING JANUARY 11-20, 2014

Continued favorable soil moisture expected over the unimodal sector during the second dekad of January will be beneficial for crop establishment and finalizing planting of crops in the region. The *vuli* rains are on cessation stages over the bimodal areas. Timely weeding is therefore recommended to salvage little soil moisture available for crops. Farmers are advised to seek professional advice from their extension officers.

Prepared by
TANZANIA METEOROLOGICAL AGENCY
3rd, 4th & 10th Floors - Ubungo 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