TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 20. 2013/14 Cropping Season **Review for March 11-20 and update for March 21-31, 2014**

HIGHLIGHT

Where frequent rains and thundery showers are predicted, farmers are advised to take precautionary measures for their safety and their farms against flooding (water lodging conditions), soil erosion and leaching of nutrients. However, proper soil water management is recommended to salvage soil moisture and nutrients available for crops. Farmers are also advised to seek professional advice from nearby agriculture and livestock extension officers.

SYNOPTIC SUMMARY

During the second dekad of March, 2014 especially in the first five days, pressure systems over the northern hemisphere slightly relaxed. In the southern hemisphere, the St. Helena high pressure system intensified significantly while the Mascarene high pressure system intensified slightly. On the other hand, the meridional arm of the Inter-Tropical Convergence Zone (ITCZ) stayed over the extreme west and migrated eastwards while the zonal arm was slightly pushed northwards, covering most of the central and northern parts of the country. However, the situation reversed in the second five days of the dekad. 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 northeasterly winds dominated much of the country.

WEATHER SUMMARY

During the period under review, the country received significant rainfall over both unimodal and bimodal areas. The highest amount of rainfall during the dekad was recorded at Mahenge (171.2 mm), followed by Tukuyu (132.4 mm), Bukoba (115.7 mm), Arusha (108.6 mm), Songwe Airport (107.6 mm), Zanzibar (99.1 mm), Iringa (98.5 mm), Mtwara (94.5 mm), Mpanda (86.2 mm), Mbimba (82.3 mm), Shinyanga (81.8 mm), Kibaha (76.6 mm), Moshi (76.3 mm), Sumbawanga (75.9 mm), Kibondo (74.8 mm), Kilimanjaro International Airport (74.5 mm), Lyamungo (74.2 mm), Musoma (73.7 mm), Amani (72.1 mm), Singida (71.3 mm), Mlingano (71.3 mm), Igeri (71.2 mm), Mugumu (70.5 mm), Songea (69.9 mm), Tabora (69.7 mm), Julius Nyerere International Airport (69.1 mm), Kigoma (63.0 mm), Pemba (60.1 mm), Uyole (57.3 mm), Morogoro (57.0 mm), Mbeya (56.5 mm) and Babati (53.4 mm). The remaining few areas experienced dekadal total rainfall below 40 mm as shown in Figure 1 below.

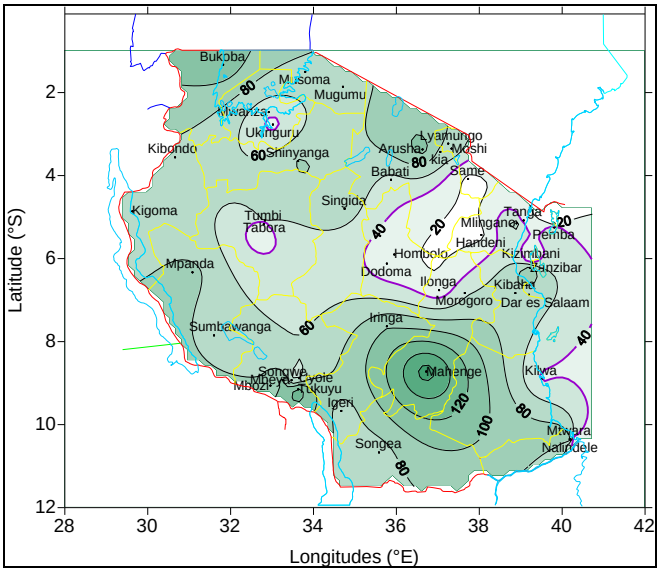

Figure 1: March 11–20, 2014 dekadal total rainfall distribution in millimeters.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the period under review, rainfall that was experienced over the unimodal areas was favourable for crop and pasture development. As observed over the western regions, maize crop was at waxy ripeness while over central regions the crop was mostly at tasseling stage. Over the southern coast and southern regions, maize crop was largely at waxy ripeness stage and beans crop had attained full ripeness. Maize crop over southwestern highlands was between tasseling and waxy ripeness. Generally, crops in these areas were reported in good condition and good harvests are expected. However, maize crop over Kahama areas experienced wilting conditions while at tasseling stage due to long dry spells that occurred in the area. Over the bimodal areas the rainfall that was observed during the dekad was favourable for crop establishment over much of the region. Planting of *Masika* crop was still taking place in some areas as observed in Magu, Musoma, Simanjiro, Mwanga, Same and Muheza districts. Heavy rainfall that occurred

in Magole village (Kilosa district) had negative effects on crops which were between germination and establishment stages.
Pastures and water availability for livestock and wildlife have improved over much of the country.

Hydrological Summary

Water levels in dams and river flows continued to improve over much of the country, largely over the unimodal areas and few areas of the bimodal sector.

Environmental Summary

During the period of March 11-20, 2014 warmer temperature conditions prevailed over much of the country.

EXPECTED SYNOPTIC CONDITIONS DURING MARCH 21-31, 2014

In the third dekad of March, 2014 high pressure systems over the northern hemisphere are expected to relax slightly while in the southern hemisphere, both the St. Helena and the Mascarene high pressure systems are expected to intensify. This configuration is expected to contribute to the orientation of the ITCZ to be confined over most parts of the country and to influence activities in the country. On the other hand, the meridional arm of the ITCZ is expected to shift further eastern side of Congo basin, influencing weather over western and central parts of the country. Neutral to warm sea surface temperatures in South West Indian Ocean, close to Tanzanian coast, are likely to enhance convection over some areas and therefore enhance activities especially over the coastal areas during the dekad.

EXPECTED WEATHER DURING MARCH 21-31, 2014

Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Frequent thunderstorms and rain showers are expected especially in the last five days of the dekad. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba) and northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Rain showers with isolated thunderstorms are expected especially in the last five days of the dekad. Central areas (Dodoma and Singida regions): Few rains with isolated thunderstorms are expected especially in the last five days of the dekad. Southern region (Ruvuma region): Frequent thundery showers are expected. Southwestern highlands (southern Rukwa, Katavi, Njombe, Iringa and Mbeya region) and southern coast (Mtwara and Lindi regions): Frequent thundery showers are expected, throughout the dekad.

AGRO METEOROLOGICAL OUTLOOK DURING MARCH 21-31, 2014

During the period of March 21-31, 2014, the expected rainfall over the unimodal areas will be favorable for crops and pasture development. Over the bimodal areas, the predicted rains will be useful for crop establishment. Where frequent rains and thundery showers are predicted, farmers are advised to take precautionary measures for their safety and their farms against flooding (water lodging conditions), soil erosion and leaching of nutrients. However, proper soil water management is recommended to salvage soil moisture and nutrients available for crops. Farmers are also advised to seek professional advice from nearby agriculture and livestock extension officers.

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