TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 25. 2013/14 Cropping Season **Review for May 1-10, 2014 and Updates for May 11-20, 2014**

HIGHLIGHTS

- Rainfall performance during May 1-10, 2014 was favourable for crops development mainly over the bimodal areas.
- Periods of strong wind are predicted during May 11-20, 2014 over most parts of the country, thus farmers are advised to take precautionary measures for their safety and property.

SYNOPTIC SUMMARY

During May 1-10, 2014 pressure systems over the northern hemisphere relaxed significantly as compared to previous dekad. In the southern hemisphere, the Mascarene high pressure system continued to intensify and extended a ridge mainly over southwestern, southern and central parts of the country. The ridge was pushing the zonal arm of the Inter-Tropical Convergence Zone (ITCZ), resulting into mainly wet conditions over the north-western highlands, northern and eastern parts of the country.

WEATHER SUMMARY

In view of the synoptic conditions that prevailed during the dekad, the country continued to receive seasonal rainfall mainly over bimodal areas, with few pocket areas over the unimodal areas receiving significant rainfall amounts. Figure 1 below shows Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network with similar pattern of total rainfall distribution.

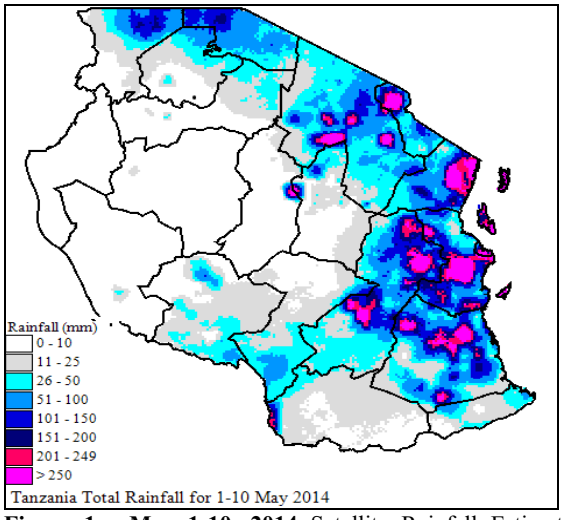

Figure 1a: May 1-10, 2014 Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations networks showing total rainfall distribution.

The highest amount of rainfall during the dekad was recorded at Pemba (516.8 mm) followed by Matangatuani (361.6 mm), Zanzibar (315.4 mm), Lyamungo (218.7 mm), Tanga (188.5 mm), Mlingano (157.4 mm), Bukoba (137.1 mm), Dar es Salaam Port (110.7 mm), Kilwa (102.2 mm), Julius Nyerere International Airport (97.7 mm), Tukuyu (95.5 mm), Mahenge (94.8 mm), Moshi (93.6 mm), Musoma (85.2 mm), Kizimbani (77.7 mm), Ngerengere (73.8 mm), Morogoro (81.0 mm), Kibaha (62.9 mm), Handeni (58.1 mm), Kilimanjaro International Airport (56.1 mm), Arusha (49 mm), Amani (44.1 mm) and Ilonga (41.4 mm). The remaining areas received dekadal total rainfall below 40 mm.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the period under review, the rainfall received over the bimodal areas was favourable for crops development, mainly over the bimodal areas of the country. Maize crop over much of the bimodal areas (Lake Victoria basin, northeastern highlands and northern coast) was between flowering and waxy ripeness stages and was in moderate condition. Over the unimodal areas, maize crop over most of the region (western regions, southern coast, southern regions, southwestern highlands and central regions) was at full ripeness stage with good condition. Pastures and water availability for livestock and wildlife is good over much of the country.

Hydrological Summary

Water levels in dams and river flows discharge improved greatly over much of the country during the first dekad of May.

Environmental Summary

During the first dekad of May, 2014, moderate to cool temperature conditions prevailed in the country.

EXPECTED SYNOPTIC CONDITIONS DURING MAY 11-20, 2014

In the second dekad of May, pressure systems over the northern hemisphere are expected to relax significantly while in the

southern hemisphere, both the St. Helena and the Mascarene high pressure systems are expected to intensify more. With this configuration, the orientation of the ITCZ is expected to be confined mostly over the extreme northern parts of the country (Lake Victoria basin, North-eastern highlands and extreme northern parts of the northern coast), influencing activities over those areas. On the other hand, the meridional arm of ITCZ is expected to shift further west towards Congo basin influencing reduced weather over western parts of Lake victoria basin. However, intensification of the southern pressure systems is expected to influence the wind speed regime over most parts of the country. Neutral to warm sea surface temperatures in South West Indian Ocean, close to Tanzanian coast, are expected to enhance convection over some areas and therefore influence activities especially over the northern parts of the coast.

EXPECTED WEATHER DURING MAY 11-20, 2014

Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Rain-showers and isolated thunderstorms are expected especially during the first half of the dekad. Periods of enhanced precipitation and strong wind are also expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba**)**: Rain-showers and periods of strong wind over few areas are expected. North-eastern highlands (Kilimanjaro, Arusha and Manyara regions): Rain-showers with isolated thunderstorms over few areas, especially over high ground are expected mainly during the first half of the dekad. Periods of strong wind over few areas are also expected. Western regions (Kigoma, Rukwa and Tabora regions): Isolated rain showers, and periods of strong wind are expected. Central areas (Dodoma and Singida regions): Few rains showers, and periods of strong wind are expected, particularly during the first half of the dekad. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): Showers and periods of strong wind are expected. Southern Coast (Mtwara and Lindi regions): Occasional rain-showers and periods of strong wind are expected. Southern region (Ruvuma region): Isolated showers and periods of strong wind are expected.

AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING MAY 11-20, 2014

During the period of May 11-20, 2014, the expected rainfall over the bimodal areas, will be useful for crop development and will contribute to good availability of pasture and water for livestock and wildlife. Over the unimodal areas, the expected off-seasonal rainfall may favour mainly late grown crops at advanced vegetative stages. Where thundery showers and strong winds are predicted, community is advised to take precautionary measures for their safety and property. However, proper soil water and crop management is recommended particularly over the bimodal areas to salvage soil moisture and nutrients available for crops. Farmers are strongly advised to seek professional advice from nearby agricultural and livestock extension officers.

Prepared by
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