TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 7. 2013/14 Cropping Season **November 1- 10, 2013**

HIGHLIGHTS

- The expected rains during the second dekad of November 2013 are beneficial for sowing, crop development, and regeneration of pastures over bimodal areas.
- Farmers over the unimodal sector are advised to continue with land preparations.

SYNOPTIC SUMMARY

During the first dekad of November 2013, the northern hemisphere high pressure systems, (the Azores and Siberian highs) continued to strengthen while in the southern hemisphere, the St. Helena high and Mascarine high pressure systems slightly relaxed. This setting generally made the ITCZ to slightly reach the northern parts of the country especially the north-eastern highlands. Wind flow maintained a low level convergence throughout the period over the Lake Victoria Basin and western areas of the country. Moist south easterly to easterly winds were favored to reach the coastal regions of the country and the hinterland.

WEATHER SUMMARY

In view of the observed synoptic condition, areas around the Lake Victoria basin and western regions experienced thundershower activities, while rain showers occurred over the areas along the coast and its hinterland, and the high grounds of south western and north eastern highlands. As shown figure 1a, the highest amount of rainfall during the dekad was recorded at Zanzibar (107.1mm), followed by Tanga (97.7mm), Mwanza (94.6mm), Same (83.3mm), Mlingano (80.7mm), Bukoba (78.1mm), Amani (78mm), Pemba (63.9mm), Lyamungo (48mm), Kigoma (47.6mm), Arusha (47.2mm), Handeni (43.0mm), Mahenge (41.8mm), Moshi (38.9mm), Musoma (36.1mm) and Kia (34.3mm). The remaining stations recorded rainfall less than 10mm. Similar rainfall pattern is also shown by the Geospatial Water Requirement Satisfaction Index (GeoWRSI) obtained from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network as shown in figure 1b.

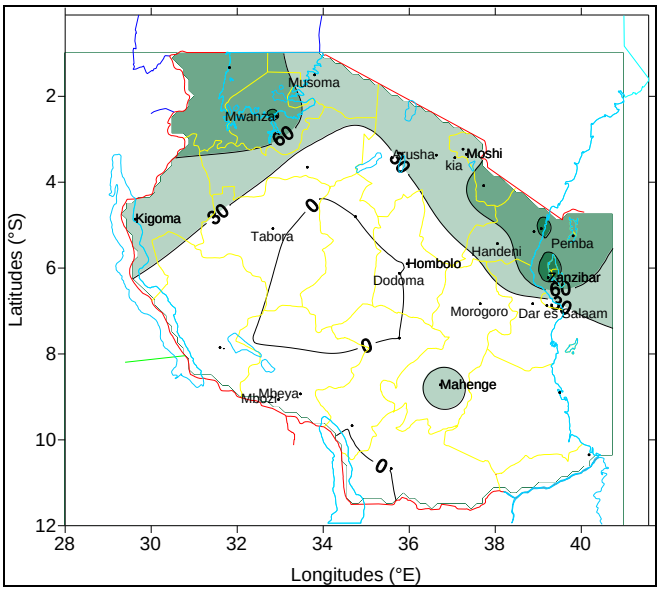

Figure 1a: November l-10, 2013 Rainfall distribution (mm)

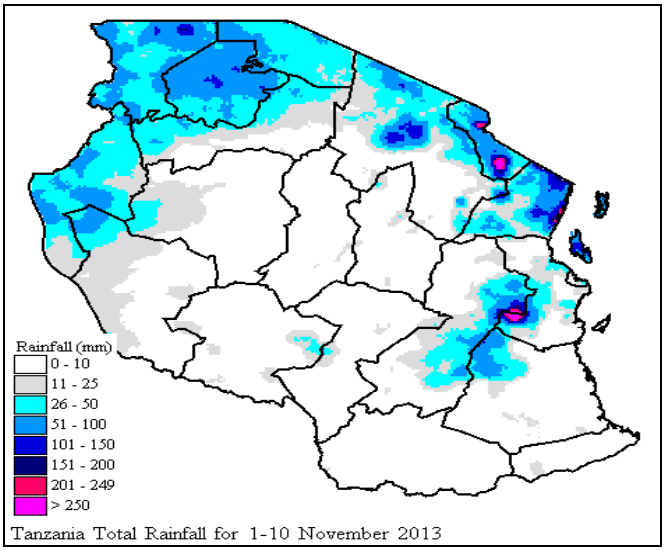

Figure 1b: November l-10, 2013 rainfall distribution (mm) from Satellite Rainfall Estimates (GeoWRSI).

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the first dekad of November 2013, wet conditions that were observed over parts of bimodal areas and Kigoma region signify the commencement of short rain season (*Vuli*) in those areas. The observed rainfall over Lake Victoria basin (Mwanza and Kagera), Kigoma, parts of northern coast (Dar es Salaam, Morogoro, Tanga regions, and the Isles of Unguja and Pemba), parts of north-eastern highlands (Arusha and Kilimanjaro regions) are good indication that the *Vuli* rains have started to set in. Farmers in some areas of the bimodal sector including Kagera, Same, Handeni (Tanga) and Sengerema (Mwanza) are weeding particularly maize crop, while others in areas like Rombo, Ukiriguru and Mlingano are still planting. Over the unimodal sector, land preparation was the major activity. Pastures and water availability for livestock and wildlife were slightly improving, especially over the bimodal sector.

Hydrological Summary

Water levels in dams and river-flow continued to decrease due to prevailing seasonal dry conditions over most parts of the country.

Environmental Summary

During the period temperature conditions over much of the country was at increasing trend.

EXPECTED SYNOPTIC CONDITIONS DURING NOVEMBER 11-21 , 2013

During the second dekad of November 2013, pressure systems over the northern hemisphere are expected to intensify while their counterparts in the southern hemisphere are expected to continue relaxing. On the other hand the moist south-easterly to easterly flow is expected over the coast. Low level wind convergence is expected to dominate over the Lake Victoria basin towards western part of the country. Slightly warm SSTs are expected to be observed over West Indian Ocean closer to east African coast. This configuration is anticipated to trigger thundershower activities over the Lake Victoria basin and enhancement over the western areas while persistence of rain showery activities are likely along the coast, its hinterlands, and north-eastern highlands. Other areas of the country are expected to experience mainly dry conditions with occasional light rain showers. However, reduced rainfall condition is anticipated over some parts of the coast belt and north-eastern highlands during the first half of the dekad.

EXPECTED WEATHER DURING NOVEMBER 11-20, 2013

Lake Victoria basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region) and western regions (Kigoma, Rukwa and Tabora regions): Frequent thundershowers are expected. North eastern highlands (Kilimanjaro, Arusha and Manyara regions): Rain showers are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Unguja and Pemba) and southern coast (Mtwara and Lindi regions): Rain showers are expected over few areas. Southern region (Ruvuma region): Mostly partly cloudy to cloudy conditions, with occasional rain showers, are expected. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): Mainly dry conditions, with few rain showers mainly over the high grounds. Central areas (Dodoma and Singida regions): Mainly dry conditions are expected.

AGROMETEOROLOGICAL OUTLOOK DURING NOVEMBER0 11-20, 2013

The expected rains during the second dekad of November 2013 are beneficial for crop development over some of bimodal areas mainly Kagera, Geita, Mwanza and Mara regions as well as Kigoma region. The rest of bimodal areas should continue with planting where soil moisture is sufficient to support crop germination. Farmers over the unimodal sector are advised to continue with land preparations.

Prepared by
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