TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 8. 2012/13 Cropping Season

November 11-20, 2012

HIGHLIGHTS

Most areas across the country experienced decreased soil moisture conditions during the dekad impeding field activities particularly planting of crops for the current `Vuli` season prevailing over bimodal sector, while land preparation was extensively progressing in the unimodal sector.

SYNOPTIC SUMMARY

During the second dekad of November, 2012, southern hemisphere high pressure cells (anticyclones), the St Helena was gradually intensifying while the Mascarene was noted to gradually relax. On the other hand, the Azores anticyclone was slightly relaxing while the Siberian high and the associated Arabian ridge over the northern hemisphere were noted to significantly intensify. As a result, the Meridional arm of the Inter-Tropical Convergence Zone (ITCZ) was slightly pushed towards east while the zonal arm of the ITCZ moved south wards from its previous position respectively, influencing enhancement of rainfall over the Lake Victoria basin and Western parts of Tanzania. Sustained warm and cool sea surface temperature (SST) pattern was observed over the Eastern Indian Ocean and Central Indian Ocean respectively while cool to neutral conditions were observed over the Western Indian Ocean. The overland ridge from Southern Africa was generally intense, resisting push of the easterlies to south-easterlies towards the Tanzania coastal line, thus, rendering them dry.

RAINFALL SUMMARY

During the dekad under review decreased levels of rainfall were recorded over most areas of the country, while a few areas over western and northern coast reported rainfall above 30 mm as indicated in Figs. 1a and 1b. Figure 1 indicates that the highest total amount of rainfall for the period was recorded at Mpanda (exceeding 90 mm) in Rukwa region. The Geospatial Water requirement Satisfaction Index (GeoWRSI) model with inputs from satellite estimated rainfall (RFE) and gauge data from Tanzania rainfall stations network indicates the highest rainfall between 101 to 150 mm was experienced over the Coast region as shown in Fig. 1b.

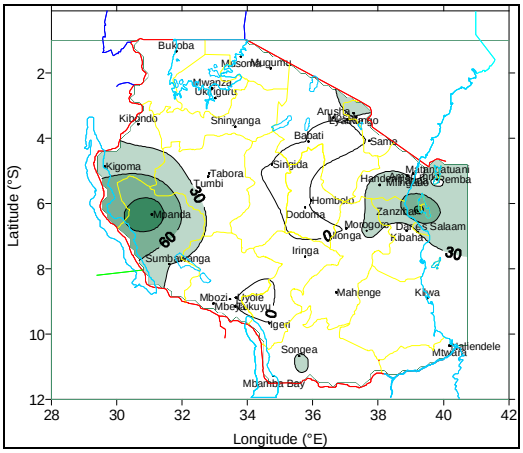

Figure 1a: November 11-20, 2012 Rainfall distribution (mm)

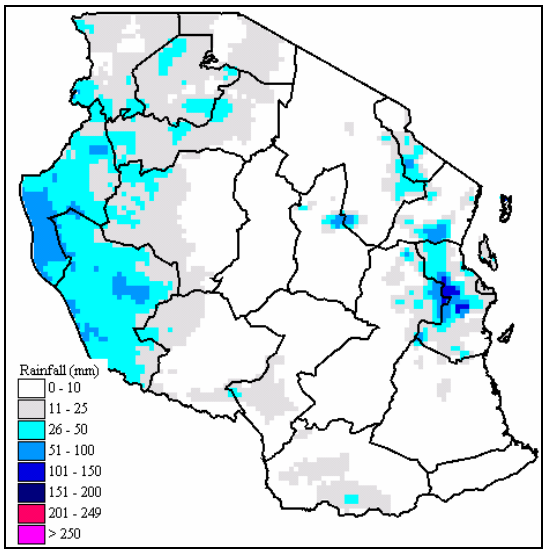

Figure 1b: November 11-20, 2012 Rainfall Totals (mm) calculated from Geospatial Water Requirement Satisfaction Index (GeoWRSI) model with inputs from satellite estimated rainfall (RFE) and gauge data.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Most areas across the country experienced decreased soil moisture conditions during the dekad impeding field activities particularly planting of crops for the current `Vuli` season prevailing over bimodal sector, while land preparation was extensively progressing in the unimodal sector. Early planted crops including maize and beans over parts of Lake Victoria basin particularly Kagera and Mara regions were observed in good state and ranging from ninth leaf to near tasselling stage for maize, and budding to wax ripeness stage on beans crop during the period. However, areas in the unimodal rainfall pattern such as central, southwestern highlands, southern region and southern coast experienced less or no rainfall for the period, a favorable condition mainly for land preparation as well as collecting of farming gear.

Pastures and water availability for livestock and wildlife started to improve over much of the country.

Hydrological Summary

Water levels in dams and river-flow were to resume during the dekad due to persistent rains received over some parts of the country.

Environmental Summary

Temperatures were generally high over much of the country as well as warm and humid air observed mainly over the coastal areas that occasionally caused discomfort.

AGROMETEOROLOGICAL OUTLOOK FOR NOVEMBER 21-30, 2012

Planting of crops mainly in bimodal areas such as Lake Victoria basin, northern Kigoma, northeastern highlands, northern coast and the Isles of Zanzibar and Pemba are likely to benefit from the soil moisture improvement expected to continue during the third dekad of November,2012.

EXPECTED SYNOPTIC SITUATION DURING NOVEMBER 21-30, 2012

During this period, the southern pressure systems including St. Helena and Mascarene are expected to continue relaxing while their counterpart to the north are expected to continue intensifying. The ITCZ is thus expected to strengthen over most part of the country, especially over Lake Victoria basin, western, north-eastern highland, northern coast regions and adjoining areas of south-western highlands, Southern coast and central regions of the country. Mostly dry Easterly to North-easterly low level winds, causing confluent flow over the coastal areas, are expected to dominate during the dekad over much of the coastal areas.

EXPECTED WEATHER DURING NOVEMBER 21-30, 2012

Lake Victoria Basin (Kagera, Mwanza, Mara, Geita, Simiyu and Shinyanga regions): normal rains are expected. Nort-earn highlands (Kilimanjaro, Arusha and Manyara regions): Normal rains are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Zanzibar and Pemba): Normal rains are expected during the dekad. Western regions (Kigoma and Tabora regions): Normal to above normal rains are expected during the dekad. Central areas (Dodoma and Singida regions): Normal rains are expected during the dekad. Southern Coast (Mtwara and Lindi regions): Below normal rains are expected over the dekad. Southern region (Ruvuma region): Normal rains are expected over the dekad.

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