TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 16. 2014/15 Cropping Season **Review for February 11-20, 2015 and Outlook for February 21-28, 2015**

HIGHLIGHT

- During *February 11-20, 2015*, seasonal rainfall continued to feature over most of the unimodal areas. The bimodal areas also received off-seasonal rainfall especially Lake Victoria basin and north-eastern highlands.
- The expected rainfall over the unimodal areas during *February 21-28, 2015* will be useful for crops and pasture development.
- Where thunderstorms are predicted, farmers are advised to take precautionary measures for their safety and properties.

SYNOPTIC SUMMARY DURING FEBRUARY 11-20, 2015

During February 11-20, 2015, high pressure systems over the northern hemisphere (Azores and Siberian highs) intensified significantly. In the southern hemisphere, the St Helena high pressure system maintained its strength while the Mascarene high intensified slightly. As a result, the Meridional arm of the Inter-Tropical Convergence Zone (ITCZ) was slightly located in the extreme western part of the country while the zonal arm of the ITCZ moved south wards to extreme southern sector of the country. Neutral to slightly warm Sea Surface Temperatures (SSTs) pattern was observed over the Eastern Indian Ocean and Central Indian Ocean respectively while cool conditions were observed over Western Indian Ocean. The Arabian ridge generally intensified, allowing penetration of the northerly to north-easterly winds towards the Tanzania coastal line and thus influenced moderate rainfall over Lake Victoria basin, central, North-eastern highlands and the coastal regions).

WEATHER SUMMARY DURING FEBRUARY 11-20, 2015

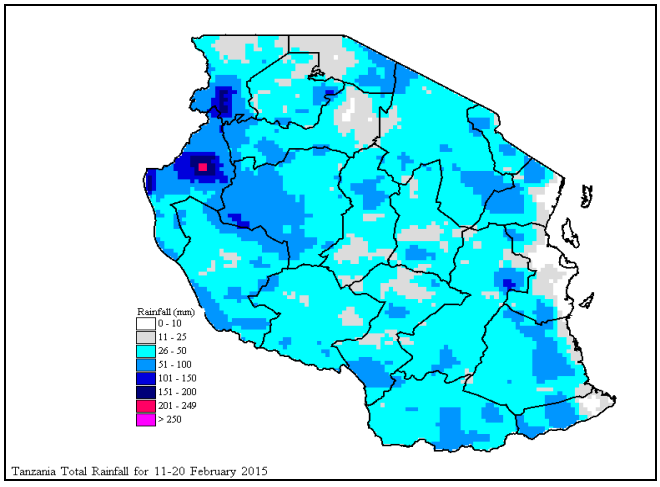

Figure 1: Total rainfall distribution (mm) during February 11-20, 2015.

In view of the observed synoptic conditions during February 11-20, 2015, seasonal rains continued to feature over most of the unimodal areas of the country. The bimodal areas also received off-seasonal rainfall especially areas around Lake Victoria basin and north-eastern highlands. Figure 1 is Satellite Rainfall Estimates merged with gauge data from Tanzania rainfall stations network showing total rainfall distribution during the period whereby seasonal rainfall is shown to feature well over most of the unimodal areas. Off- seasonal rainfall is also evident over some of the bimodal areas. The highest total rainfall was 201-249 mm recorded over Kigoma region. However, a large part of the unimodal areas including south-western highlands, southern region and parts of southern coast received below normal rainfall except western regions that received above normal rainfall as shown in Figure 2 (rainfall performance as percentage of long term average during the period). Over the bimodal areas, the observed off-seasonal rainfall was above normal especially over north-eastern highlands and parts of Lake Victoria basin.

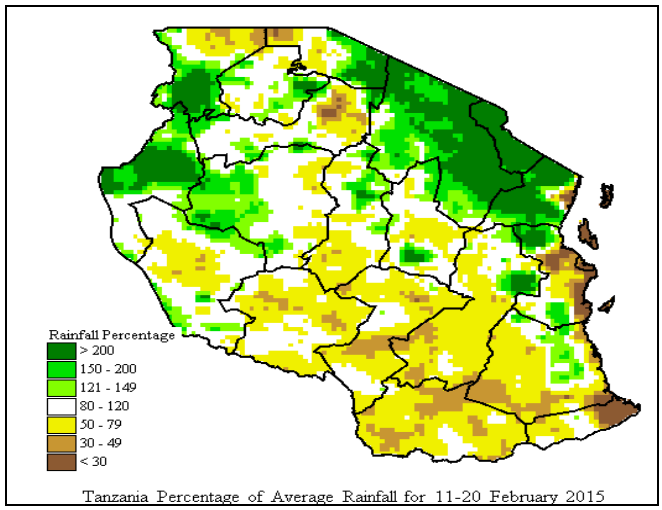

Figure 2: Rainfall performance during February 11-20, 2015 as percentage of long term average.

AGROMETEOROLOGICAL SUMMARY DURING FEBRUARY 11-20, 2015

During February 11-20, 2015, the observed rainfall over the unimodal areas was useful for development of crops and pasture. Maize crop over much of unimodal areas was at flowering stage and in moderate condition. However long dry spells in central areas and Western part of Shinyanga region (Kahama district) caused wilting of maize crops in those areas. A case of hailstone that damaged crops in the fields was also reported in Mbozi district in south-western highlands (see Plates 1 and 2). Water availability for livestock and wildlife was moderate over much of the country.

Plate 1: Hailstone that occurred in Mbozi district on 12th February, 2015

Plate 2: Maize crop at flowering stage affected by hailstone.

HYDROLOGICAL CONDITIONS DURING FEBRUARY 11-20, 2015

Water levels in dams and river flow discharges were moderate over much of the country

ENVIRONMENTAL CONDITIONS DURING FEBRUARY 11-20, 2015

During February 11-20, 2015 moderate to higher temperature conditions prevailed in the country.

EXPECTED SYNOPTIC CONDITIONS DURING FEBRUARY 21-28, 2015

During February 21-28, 2015, the northern hemisphere high pressure systems are expected to continue intensifying whereas their counterparts to the southern hemisphere particularly the Mascarene are expected to maintain their relatively low intensity. This configuration is expected to maintain the ITCZ over unimodal areas of the country, especially over Western, South-western highlands, Southern, Southern coast and central regions of the country. Low level northerly wind is expected to dominate over the Lake Victoria basin, while Low level westerly and northwesterly wind convergence is expected to dominate over the western, south-western, central and southern areas of the country. Slight warm SSTs is expected to be observed over Atlantic Ocean closer to Angola coast. Neutral to warm sea surface temperatures are expected to be observed over South West Indian Ocean.

EXPECTED WEATHER DURING FEBRUARY 21-28, 2015

Lake Victoria Basin (Kagera, Mwanza, Mara, Geita, Simiyu and Shinyanga regions): isolated thunderstorms and rain showers are expected. North-eastern highlands (Kilimanjaro, Arusha and Manyara regions): mainly dry conditions are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the isles of Unguja and Pemba): mainly dry conditions are expected. Western regions (Kigoma and Tabora regions): frequent thundershowers are expected. Central areas (Dodoma and Singida regions): rain showers and isolated thunderstorms are expected. South-western highlands (Rukwa, Iringa and Mbeya regions): rain showers with isolated thunderstorms are expected. Southern Coast (Mtwara and Lindi regions): Seasonal rains are expected to continue. Southern region (Ruvuma region): Rain showers with isolated thunderstorms.

AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING FEBRUARY 21-28, 2015

The expected rainfall over the unimodal areas during February 21-28, 2015 will be useful for crops development and growth of late planted crops. However, proper farm management is recommended to salvage the soil moisture available for crops. Where thunderstorms and thundershowers are predicted, farmers are advised to take to take precautionary measures for their safety and properties. Farmers are also advised to seek professional advice from nearby Agricultural and livestock extension officers.

HYDROLOGICAL OUTLOOK DURING FEBRUARY 21-28, 2015

During February 21-28, 2015, water levels in dams and river flow discharges are expected to be in moderate condition over the unimodal areas but low over the bimodal areas.

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