TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 10. 2014/15 Cropping Season **Review for December 11-20, 2014 and Outlook for December 21-31, 2014**

HIGHLIGHT

- During *December 11-20, 2014*, seasonal rainfall continued to feature over some of the bimodal and unimodal areas of the country. The rainfall provided favorable conditions for crops and pasture despite the observed dry spells during the dekad.
- The expected rainfall during *December 21-31, 2014* may be favourable for crops development over the bimodal areas and crop growth over the unimodal areas.
- Community is advised to take precautionary measures for people's safety and properties where thunderstorms are predicted.

SYNOPTIC SUMMARY DURING DECEMBER 11-20, 2014

During December 11-20, 2014, high pressure systems over the northern hemisphere (Azores and Siberian highs) remained fairly strong while the high pressure systems in the southern hemisphere (St Hellena and Mascarene highs) continued to relax contributing to significant southward shifting of the Inter-Tropical Convergence Zone (ITCZ) over the country. North-easterly wind flow and occasional easterly flow continued to dominate a greater part of the country while westerly wind that flew over the western areas resulted into persistent wind convergence over those areas. This configuration contributed to enhanced rainfall activities over the western and south-western highlands.

WEATHER SUMMARY DURING DECEMBER 11-20, 2014

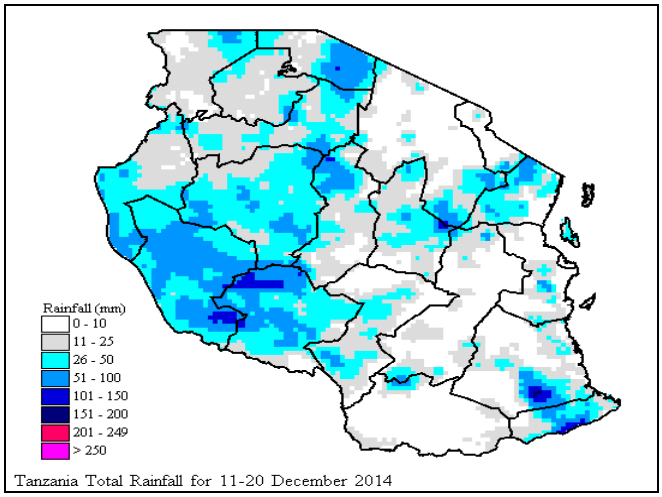

Figure 1: Figure 1: Improved rainfall estimates showing total rainfall distribution during December 11-20, 2014.

During December 11-20, 2014, seasonal rains continued to feature over some of the bimodal and unimodal areas of the country whereby especially Lake Victoria basin, western and south-western highlands. The highest total rainfall was 101-150 mm recorded in Mara, Mbeya, Mpanda, Dodoma, Lindi and Mtwara regions. However, dry conditions were observed in some places including north-eastern highlands and northern coast and southern regions as shown in Figure 1(improved Rainfall Estimates from Satellite Rainfall Estimates merged with gauge data from Tanzania rainfall stations network showing total rainfall distribution in the country). Figure 2 (improved Rainfall Estimates from Satellite Rainfall Estimates merged with gauge data from Tanzania rainfall stations network) is also showing rainfall performance as percentage of long term average whereby a large part of the country received below normal to normal rainfall during the dekad.

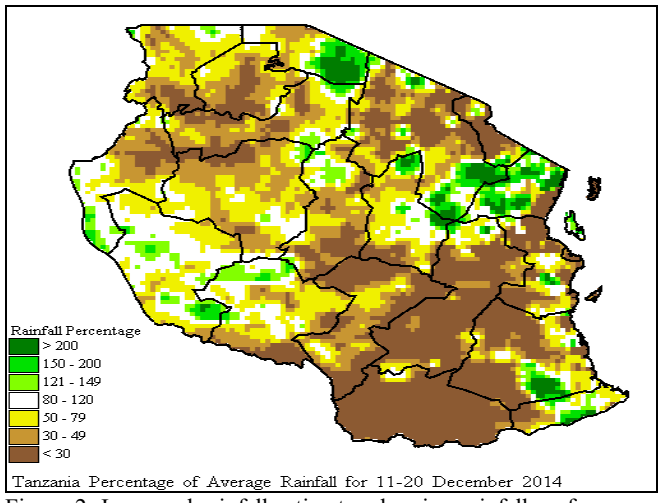

Figure 2: Improved rainfall estimates showing rainfall performance as percentage of long term average rainfall during December 11-20, 2014.

AGROMETEOROLOGICAL SUMMARY DURING DECEMBER 11-20, 2014

During December 11-20, 2014, the observed rainfall provided favourable conditions for crops and pasture in most places over both the unimodal and bimodal areas despite the observed dry spells in some palces including north-eastern highlands and northern coast. Maize crop over much of the bimodal areas was between flowering and waxy ripeness stages, beans crop in Killimanjaro

region was observed at full ripeness stage. Both crops were in good condition. Over the unimodal areas, maize crop was reported to establish well in many places. However, re-planting of maize crop was carried out in some areas including Ruvuma region due to long dry spell durations that occurred during the dekad. Water and pasture availability for livestock and wildlife were moderate across the country.

HYDROLOGICAL CONDITIONS DURING DECEMBER 11-20, 2014

Water levels in dams and river flow discharges were moderate across the country.

ENVIRONMENTAL CONDITIONS DURING DECEMBER 11-20, 2014

During December 11-20, 2014 moderate to high temperature conditions prevailed in the country.

EXPECTED SYNOPTIC CONDITIONS DURING DECEMBER 21-31, 2014

During December 21-31, 2014 the nothern hemisphere high pressure systems (Azores and Siberian highs) are expected to remain intense thus allowing the ITCZ to move further southwards over the country. On the other hand, southern hemisphere high pressure systems (St Hellena and Mascarene highs) are expected to remain relaxed with occasional intensification of the St Helena high pressure system. Warm Sea Surface Temperatures (SSTs) are expected over the South-west Indian Ocean and are likely to influence easterly wind flow pattern. Low level westerly flow over the western part of the country is expected to allow moisture influx over those areas. However, significant warming of SSTs over eastern coast of Madagascar Island is likely. This situation may allow only little moisture to reach the southern parts of the country. The expected trend can therefore change if the warming will allow formation of intense deepresions in the Mozambique Channel and near north-eastern coast of madagscar Island.

EXPECTED WEATHER DURING DECEMBER 21-31, 2014

Lake Victoria (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions together with northern Kigoma regions): occasional thunderstorms and rain showers are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the isles of Unguja and Pemba): occasional rain showers and thunderstorms are expected over most areas. North Eastern Highlands (Kilimanjaro, Arusha and Manyara regions): rain showers and isolated thunderstorms are expected. Western regions (Kigoma, Rukwa and Tabora regions): occasional thunderstorms and rain showers are expected. Central areas (Dodoma and Singida regions): occasional thundershowers are expected. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): occasional thunderstorms and rains are expected. Southern Coast (Mtwara and Lindi regions): rain showers and isolated thunderstorms are expected during the period. Southern region (Ruvuma region): occasional rain showers are expected during the period.

AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING DECEMBER 21-31, 2014

The expected rainfall over the bimodal areas during December 21-31, 2014 may be favorable for crops development at advanced vegetative stages as well as pasture development. Over the unimodal areas, the expected rainfall will be favourable for crops growth. However, soil water conservation measures are recommended to salvage the soil moisture available for crops. Where thunderstorms are expected, community is advised to take precautionary measures for people's safety and their properties. Farmers are also advised to seek professional advice from nearby Agricultural extension and livestock officers.

HYDROLOGICAL OUTLOOK DURING DECEMBER 21-31, 2014

Water levels in dams and river flow discharges are expected to improve.

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