TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 11. 2013/14 Cropping Season **December 11-20, 2013**

HIGHLIGHTS

- The soil moisture expected during the third dekad of December 2013 is beneficial for crop and pasture development over the bimodal sector.
- Farmers over the unimodal sector are advised to engage largely on planting of crops as soil moisture expected during the period favors both the planting activities as well as crops mostly at emergence to growth stages.

SYNOPTIC SUMMARY

During the second dekad of December 2013, the northern hemisphere high pressure systems (the Azores and Siberian highs) continued strengthening while in the southern hemisphere, the St. Helena high and Mascarine high pressure systems continued relaxing. This setting generally made the Inter–Tropical Convergence Zone (ITCZ) to cover most parts of the country. The meridional arm slightly retreated west-wards and covered the western sector of the country. In terms of wind flow, low level convergence was maintained throughout the period over the Lake Victoria Basin, western, south-western highlands and north-eastern highlands areas of the country. Moist north easterly to easterly winds were favored to reach the coastal regions of the country and the hinterland especially during the first half of the dekad.

WEATHER SUMMARY

In view of the observed synoptic and weather conditions, areas around the Lake Victoria Basin, western regions, south-western highlands, southern regions, central, north-eastern highlands and few areas of the coastal belt experienced thundershower activities. As shown in Figure 1a, the highest amount of rainfall during the dekad was recorded at Mbimba (108.6 mm), followed by Lyamungo (88.0mm), Mpanda (85.9 mm), Songwe Airport (83.8 mm), Mugumu (79.0 mm), Kigoma (78.1 mm), Sumbawanga (77.0 mm), Mwanza (72.5 mm), Babati (64.3 mm), Tukuyu (60.8 mm), Igeri (59.7 mm), Tumbi (59.3mm) and Mbeya (59.3mm). The remaining stations mainly those over the eastern parts of the country including Dare es Salaam region recorded the lowest amounts of between zero and 30 mm of rainfall for the period.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the sekond dekad of December 2013, soil moisture continued to replenish over most parts of the bimodal sector as well as the unimodal sector. The adequate soil moisture acquired over the bimodal sector during the first dekad was favorable for crop and pasture development as well as maturing of maize crops especially over Kagera, Mwanza and Mara regions. Maize crop over the bimodal sector was largely at tasselling and wax ripeness stages while beans were at full ripeness, as observed over Sengerema, Magu, Bukoba, Musoma and Pemba areas of the country. Over Kigoma and the north eastern highlands including Same, maize crop was at ninth leaf stage with the ongoing weeding activity. However, in the northeastern highlands especially Kilimanjaro region, beans crop was at flowering stage but with poor state due to dry spells which occurred during the previous dekads. Over the unimodal sector, the soil moisture obtained during the dekad was favorable for planting with crops being at emergence stage in most areas including Singida, Mbeya, Songea, Ruvuma and Tabora. In other areas of the unimodal sector including Dodoma, a few farmers were planting but the majorities were still finalizing land preparations and acquisition of farm inputs. Pastures and water availability for livestock and wildlife were slightly improving largely over the bimodal sector.

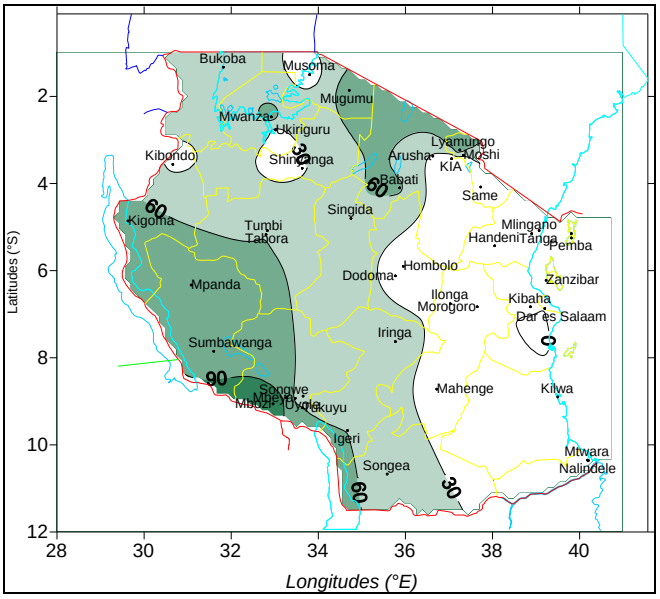

Figure 1: **December 11–20, 2013 total rainfall distribution in millimeters**

Hydrological Summary

Water levels in dams and river-flow were still low with slight improvement over few parts mainly of bimodal sector of the country.

Environmental Summary

During the period warmer temperature conditions continued to prevail over much of the country.

EXPECTED SYNOPTIC CONDITIONS DURING DECEMBER 21-31 , 2013

During the third dekad of December 2013, pressure systems over the northern hemisphere are expected to continue intensifying while their counterparts in the southern hemisphere are expected to relax further. On the other hand, expected slight warming of sea surface temperatures in West Indian Ocean off Tanzanian coast will render moist north-easterly to easterly flow over the coast. Low level wind convergence is expected to dominate over the Lake Victoria basin, northeastern highlands towards western, south-western, central and southwestern highlands. Slight warming of SSTs is expected to be observed over Atlantic Ocean closer to Angola coast. This configuration is anticipated to cause easterlies which will be in phase with the retreat of the Meridional arm of ITCZ slightly west wards.

EXPECTED WEATHER DURING DECEMBER 21-31, 2013

Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region): Frequent thundershowers are expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Unguja and Pemba): Showers and chance of thunderstorms in the second half of the dekad are expected over few areas. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Thunderstorms and showers are expected over few areas. Western regions (Kigoma, Rukwa and Tabora regions): Frequent thundershowers are expected. Central areas (Dodoma and Singida regions): Rain showers and isolated thunderstorms are expected. South-western highlands (Southern Rukwa, Katavi, Njombe, Iringa and Mbeya region): Rain showers with isolated thunderstorms are expected. Southern coast (Mtwara and Lindi regions): Rain showers and thunderstorms are expected over few areas. Southern region (Ruvuma region): Rain showers and thunderstorms are expected.

AGROMETEOROLOGICAL OUTLOOK DURING DECEMBER 21-31, 2013

The seasonal rains which are expected to continue over the unimodal sector during the third dekad of December will be favorable for planting activities and for crop establishment over most areas, as well as crop development in some areas including northern Kigoma region. The expected rains over the bimodal sector will improve soil moisture thus favoring delayed planted crop over Mwanza, Kagera and Mara regions as well as north eastern highlands and northern coast. However, the *vuli* rains are expected to cease over some of the bimodal areas during the period, especially over Lake Victoria basin. Timely weeding is therefore highly recommended to salvage little soil moisture available for crops. Farmers are advised to seek professional advice from their extension officers. In areas where planting has not yet started, farmers are advised to finalize land preparation and acquisition of farm inputs.

Prepared by
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