



DEKADAL WEATHER REVIEW

No: 9. 2013/14 Cropping Season

November 21- 30, 2013

HIGHLIGHTS

- Improved soil moisture expected during the first dekad of December 2013 is beneficial for crop and pasture development.
- Farmers over the unimodal sector are advised to engage largely on planting of crops as soil moisture expected during the period will favour most crops at emergence and establishment stages.

SYNOPTIC SUMMARY

During the third dekad of November 2013, the northern hemisphere high pressure systems, the Azores and Siberian highs continued strengthening while in the southern hemisphere, the St. Helena and Mascarene high pressure systems continued relaxing. This setting generally made the Inter-Tropical Convergence Zone (ITCZ) to cover most parts of the country and its meridional arm slightly shifting east-wards and cover 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, southwestern and northeastern highlands areas of the country. Moist northeasterly to easterly winds were favoured to reach the coastal regions of the country and the hinterlands towards second 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 highland, southern regions, coastal belt and few areas of the northeastern highlands experienced thundery shower activities, while rainshowers occurred over the hinterlands of the Tanzania coast. As shown in Figure 1a, the highest amount of rainfall during the dekad was recorded at Mahenge (144.7 mm), followed by Songea (106.6 mm), Zanzibar (103.6 mm), Kigoma (88.0 mm), Bukoba (70.6 mm), Mwanza (68.7 mm), Igeri (65.9 mm), Tanga (63.7 mm), Shinyanga (63.2 mm), Kibaha (59.6 mm), Musoma (48.2 mm), Singida (46.1 mm), Dar es Salaam (44.4 mm), Morogoro (41.4 mm), Mpanda (40.1 mm), Kilwa (38.9 mm), Sumbawanga (30.0 mm), Mbeya (25.2 mm) and Tabora (24.1 mm). The remaining stations recorded a ten-day rainfall total of less than 10 mm. Figure 1b also has similar rainfall patterns showing percentage of average rainfall obtained from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network whereby areas around Lake Victoria basin, northern Kigoma,

northern coast, southern regions and few areas of southwestern highlands experienced above normal rainfall (more than 150% of long-term average rainfall) while most parts of the northeastern highlands and central regions experienced below normal rainfall (less than 50% of long-term average rainfall).

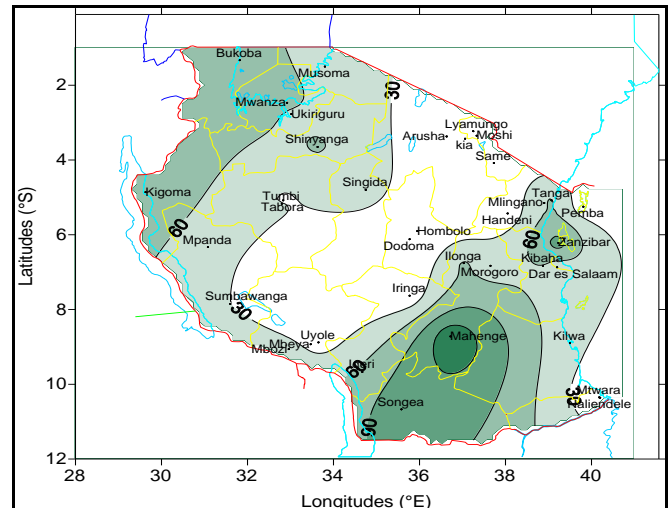


Figure 1a: November 21-30, 2013 total rainfall distribution in millimeters

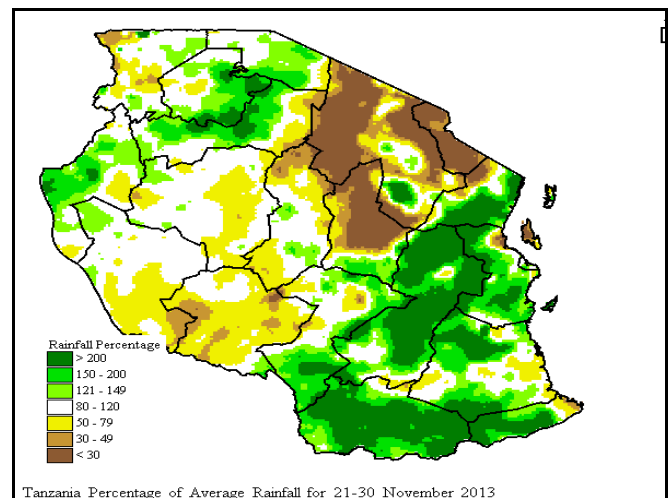


Figure 1b: November 21-30, 2013 percentage of average rainfall (mm) from Satellite Rainfall Estimates (GeoWRSI).

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

During the third dekad of November 2013, soil moisture continued to replenish over most parts of the bimodal sector. The dominant farm activity in this sector, including northern Kigoma region was weeding and crops were generally in good state. In some areas of the bimodal sector particularly Kagera and Mwanza regions, maize crop have started tasselling. However, in the northeastern highlands especially Kilimanjaro region, crops were affected by dry spells which occurred during early stages of the crops.. Over the unimodal sector, land preparations and acquisition of farm inputs were the major activities during the third dekad. However, the observed rainfall over the unimodal areas particularly southern region, western and southwestern highlands signified the approaching start of the rain season in those areas. Pastures and water availability for livestock and wildlife were slightly improving largely over the bimodal sector.

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 prevailed over much of the country.

EXPECTED SYNOPTIC CONDITIONS DURING DECEMBER 1-10 , 2013

During the first 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. On the other hand slight warming of sea surface temperatures over West Indian Ocean near Tanzania moist northeasterly to easterly flow is expected over the coast. Low level wind convergence is expected to dominate over the Lake Victoria basin towards western, southwestern, central and southern regions of the country. Slightly cool SSTs are expected to be observed over Atlantic Ocean closer to Angola coast.

EXPECTED WEATHER DURING DECEMBER 1-10, 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. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Unguja and Pemba): showers and thunderstorms are expected over few areas. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Rain showers with isolated thunderstorms are expected. Southwestern 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. Central areas (Dodoma and Singida regions): Mainly dry conditions with occasional light rains and isolated thunderstorms are expected.

AGROMETEOROLOGICAL OUTLOOK DURING DECEMBER 1-10, 2013

The expected rains during the first dekad of December, 2013 are beneficial for crop development over bimodal areas mainly Kagera, Geita, Mwanza and Mara regions as well as northern Kigoma region. Timely weeding is highly recommended to salvage little soil moisture available for crops. With the exception of central areas, the expected rains will also be beneficial for planting over the unimodal areas. Farmers over this sector are advised to start planting where they encounter sufficient soil moisture to support seed germination. However, farmers are advised to seek professional advice from their extension officers. Over the rest of the unimodal sector, including central areas where seasonal rains are so close, farmers are advised to finalize land preparation and acquisition of farm inputs.