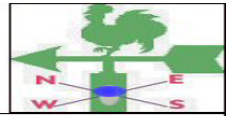




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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Review for September, 2014 and outlook for October, 2014

HIGHLIGHTS

- During the month of September, 2014, mainly seasonal rainfall (*Vuli* rain) was observed over some of the bimodal areas and was favorable for land preparation and early planting.
- The expected rainfall during October, 2014 will be favorable for planting and supporting seed germination as well as crop growth at primary stages.

SYNOPTIC SITUATION DURING SEPTEMBER, 2014

During the month of September 2014, both the northern and southern hemisphere high pressure systems remained intense. However, there were zones of weakness over the Somali coast which influenced weather over the northern coast of the country. This configuration kept the Inter-Tropical Convergence Zone (ITCZ) north of the horn of Africa. Also, the intense southern systems kept the East African Ridge intense thus influencing weather patterns on the southern parts of the country. As for Sea Surface Temperatures (SSTs), neutral to slightly warm SSTs were observed over the Somali coast while the neutral SSTs were experienced over the Tanzanian coast during the month. On the other hand, neutral to cool SSTs observed in the Atlantic Ocean near Angola and Namibian coast contributed to slightly east ward movement of the Meridional arm of the ITCZ to the western areas of the country (Kigoma).

WEATHER SUMMARY DURING SEPTEMBER, 2014

RAINFALL

In view of the observed synoptic situations during the month, the country received mainly seasonal rains (*vuli* rains) over some of the bimodal areas. Significant rainfall over the bimodal areas was observed over Lake Victoria basin, northern coast, northern Kigoma region and few areas over north-eastern highlands. Much of the unimodal areas remained mainly dry except some parts of the southern coast (over Lindi region) that received off season rainfall. Figure 1 below is Improved Rainfall Estimates from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network showing total rainfall distribution during the month. As depicted in Figure 1, the highest total rainfall (201-249 mm) was recorded over Kagera, Mara, Mwanza, Morogoro and Coast (both in the bimodal areas).

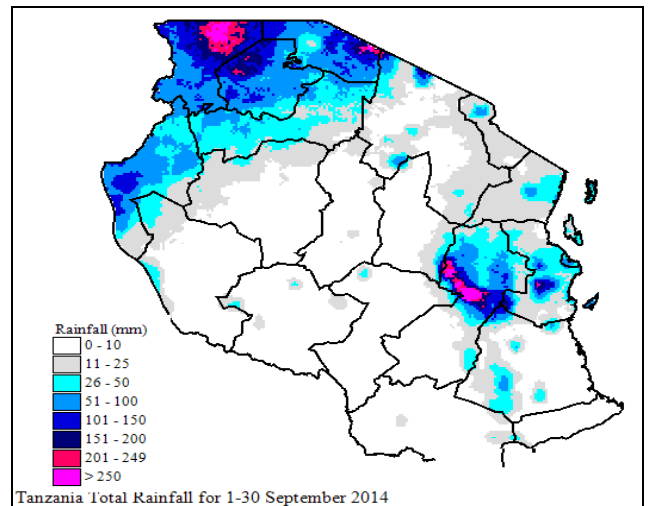


Figure 1: Improved Rainfall Estimates from Satellite Rainfall Estimates (RFE) showing total rainfall distribution during September, 2014

MEAN AIR TEMPERATURE

Mean maximum temperature during the month of September, 2014 ranged from about 18°C to about 34°C as indicated in Figure 2a below. The highest absolute maximum temperature was 34.0°C observed over Mpanda whereas the lowest absolute maximum temperature was 17.7°C observed over Igeri in the southwestern highlands.

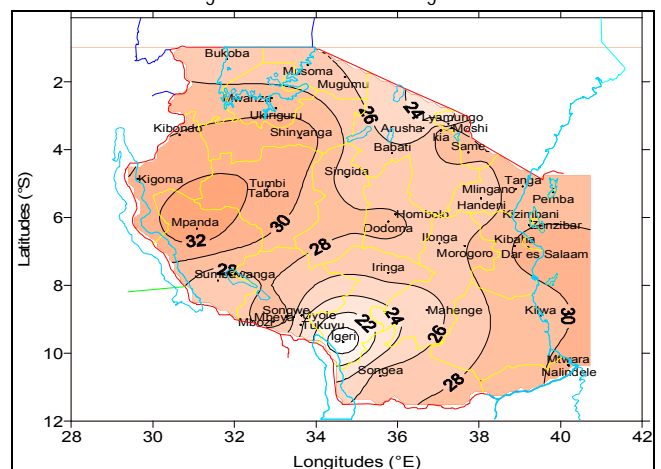


Fig. 2a: September, 2014 mean maximum temperature (°C)

The mean minimum air temperatures during September, 2014 ranged from about 8°C to about 24°C as shown in Figure 2b below. The highest absolute minimum temperature was 23.5°C recorded over Pemba whereas the lowest absolute minimum temperature was 8.8°C recorded over Igeri in southwestern highlands.

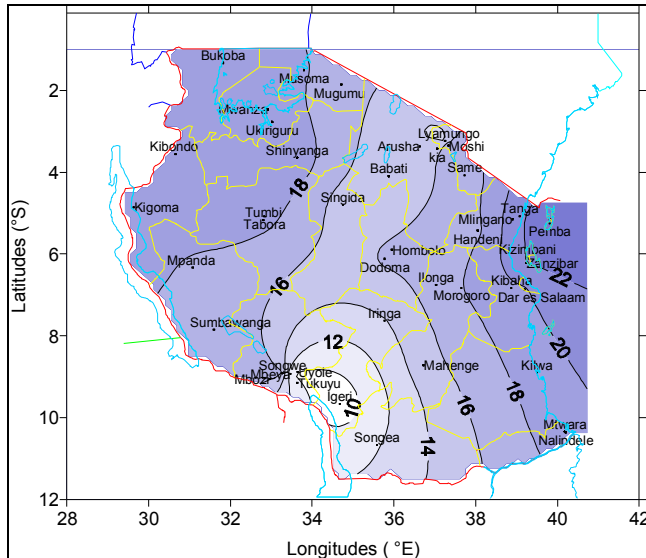


Fig. 2b: September, 2014 mean minimum temperature (°C)

MEAN SUNSHINE HOURS

Sunshine durations during the month of September, 2014 ranged from about 4 hours per day to about 10 hours per day. The longest sunshine duration was 9.6 hours/day observed over Pemba whereas the shortest sunshine duration was 4.1 hours/day observed at Lyamungu, as shown in Figure 3.

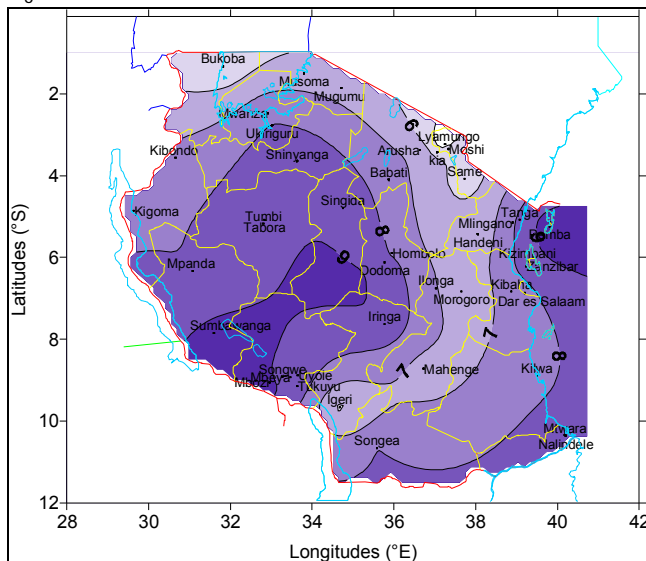


Fig. 3: September, 2014 mean sunshine hours (hrs/day)

MEAN WIND SPEED

Mean wind speed during the month of September 2014, ranged from about 0 to about 18 km/hr across the country. The highest wind speed was 18.3km/hr recorded over Songwe Airport (Mbeya region) whereas the lowest mean wind speed was 0.4 km/hr recorded over Mtwara as shown in Figure 4.

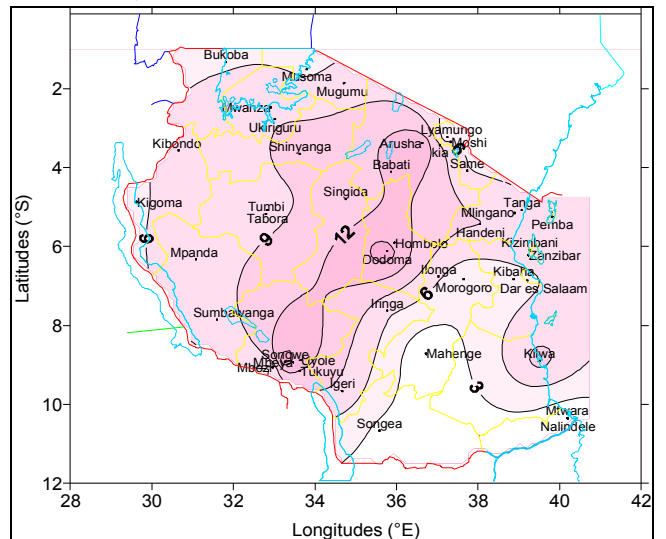


Fig. 4: September, 2014 mean wind speed (km/hr)

AGROMETEOROLOGICAL SUMMARY DURING SEPTEMBER, 2014

During the month of September, 2014, the observed seasonal rainfall over the bimodal areas was favourable for land preparation and early planting. Water and pasture availability for livestock and wildlife were moderate over much of the country.

HYDROLOGICAL SUMMARY DURING SEPTEMBER, 2014

Water levels in dams and river flows discharges were moderate over much of the country. Slight improvements were observed over the bimodal areas, particularly Lake Victoria basin.

ENVIRONMENTAL SUMMARY DURING SEPTEMBER, 2014

During the period, relatively warmer temperature conditions prevailed in the country.

EXPECTED SYNOPTIC SITUATION DURING OCTOBER, 2014

In October, 2014 the two southern hemisphere high pressure systems are expected to start relaxing slightly and northern hemisphere systems are expected to slowly continue intensifying. The weakness over the Somali coast is expected to persist and therefore influence weather over the northern coast of Tanzania. The ITCZ is expected to remain north of the horn of Africa. However, due to expected cool SSTs over the Angola and Namibian coast, the meridional arm of the ITCZ is expected to continue influencing weather over the extreme western areas of Tanzania. Neutral to cool SSTs are expected to recur over the Somali coast while neutral to slight warm SSTs are expected over the East African coast.

EXPECTED WEATHER DURING OCTOBER, 2014

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

AGROMETEOROLOGICAL OUTLOOK DURING OCTOBER, 2014

During the month of October 2014, expected rainfall over the bimodal areas will be favorable for planting and supporting seed germination as well as crop growth at primary stages. However, farmers are advised to take precautionary measures against soil erosion and water lodging conditions attributed to rain showers that may damage planted seeds and seedlings. Farmers are also advised to seek professional advice from nearby Agricultural extension and livestock officers. Over the unimodal areas, farmers are advised to finalize land preparation and acquisition of farm inputs.

Prepared by

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