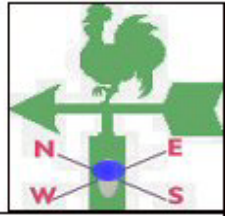




TANZANIA METEOROLOGICAL AGENCY



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HIGHLIGHTS

- Land preparation for the *Vuli* season started over most areas following early onset.
- Beans in Kagera region approaching flowering stage.
- Water levels in dams and discharges in rivers to be boosted by the early onset and generally expected normal to above normal rains

SYNOPTIC SITUATION

During the month of September 2011, southern Hemisphere high pressure cells, St Helena and Mascarin anticyclones relaxed while the Siberian high and the Arabian ridge in the northern hemisphere intensified thus pushing the zonal arm of the rain-making mechanism i.e. Inter-Tropical Convergence Zone (ITCZ) to the south. Cool Sea Surface conditions have been established over the Equatorial central-eastern Pacific, while neutral SSTs were observed over eastern Indian Ocean (areas around Indonesia). Slight warm Sea Surface Temperatures prevailed over the southwestern Indian Ocean during the month of September 2011. Southeasterly low level winds prevailed over eastern parts of the country during much of the period. However, towards the end of the month easterly and low level northeasterly wind flow was observed along the coastal areas, thus significantly enhancing rainfall over the northern coast. This configuration contributed to convergence of winds at low levels, resulting into occasional thundershowers over Lake Victoria basin and western regions.

WEATHER SUMMARY

RAINFALL

During the month of September, 2011 several stations recorded some rainfall except in the central, southwestern highlands and parts of northeastern highlands which observed almost no rainfall during the month. The highest rainfall

reported during the month was over Bukoba 214.6 mm, followed by Tanga 155.0 mm, and Zanzibar 147.4mm. Some stations reported below 20mm of rainfall as shown in Figure 1 below. The increase of rainfall amount indicates the approaching onset of the *Vuli* season.

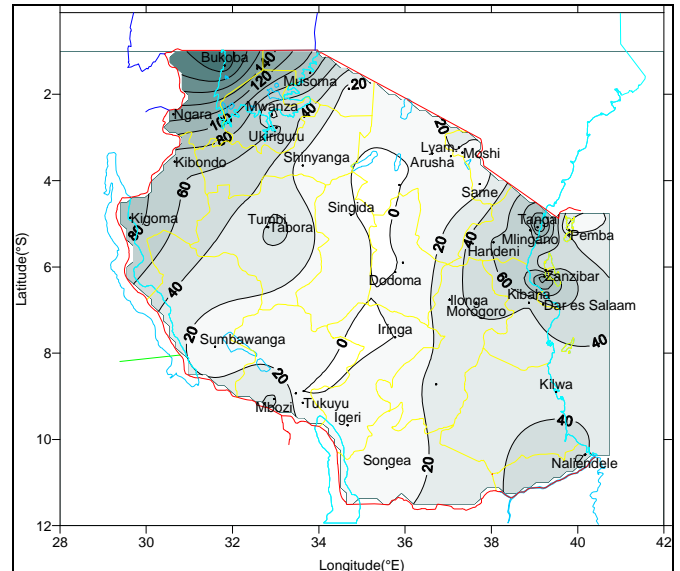


Figure 1: September 2011 Rainfall distribution (mm)

MEAN AIR TEMPERATURE

Mean maximum temperatures ranged between 17°C and 31°C as indicated in Figure 2A. The highest absolute maximum temperature of 30.9 °C was reported at Shinyanga during the third dekad of the month. The lowest mean maximum temperature was about 17.1 °C over Igeri in the south western highlands.

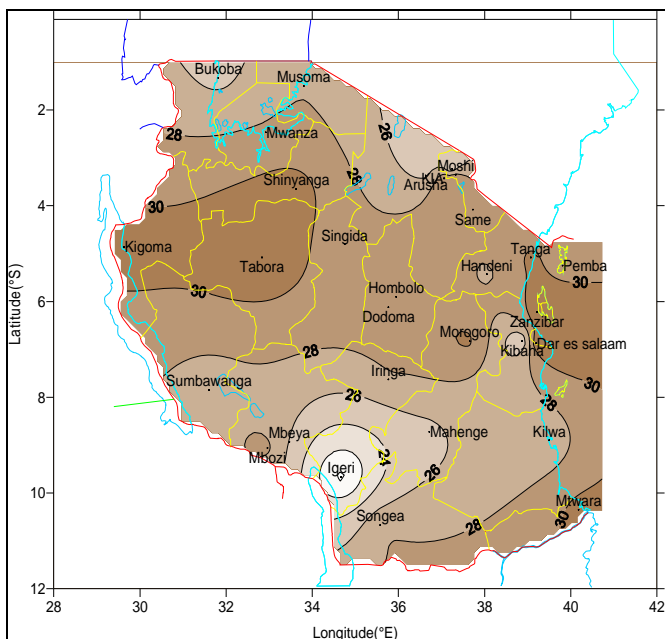


Figure 2A: Sept.ember 2011 Mean maximum temperature (°C)

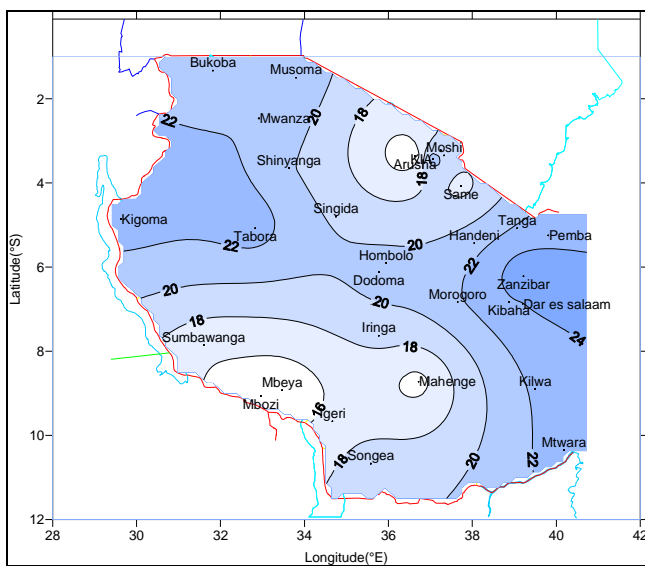


Figure 2B: Sept 2011 Mean minimum temperature (°C)

During the month under review the country experienced cool to cold temperatures where cold temperatures were experienced over areas in the southwestern highlands of the country like Mbeya as indicated in Figure 2B. Mean minimum air temperatures ranged from 6 °C to 24°C, while the absolute mean temperature value of 24.0 °C was recorded at Pemba over the coastal belt during the first dekad of the month.

MEAN SUNSHINE HOURS

Sunshine duration across the country during September indicates that the mean bright sunshine hours ranged from about 3 hrs/day over Kagera region in the Lake basin to 9 hrs/day over parts of southwestern highlands, western and central region, as shown in Figure 3. below.

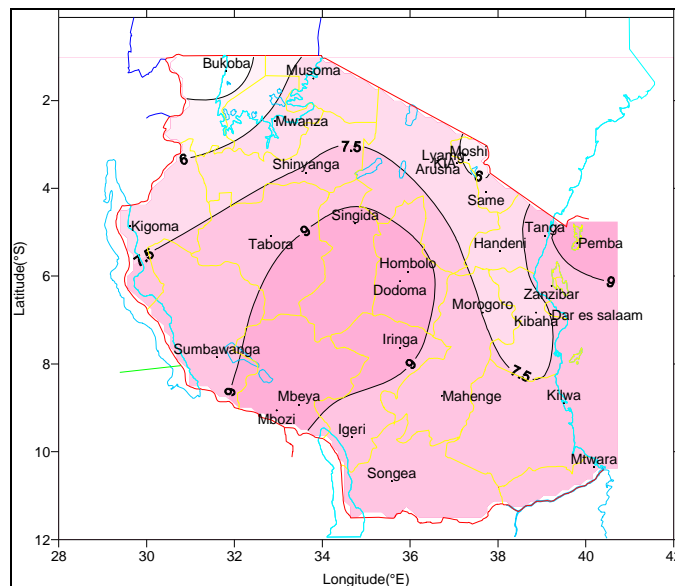


Figure 3: Sept. 2011 Mean sunshine hours (hrs/day)

MEAN WIND SPEED

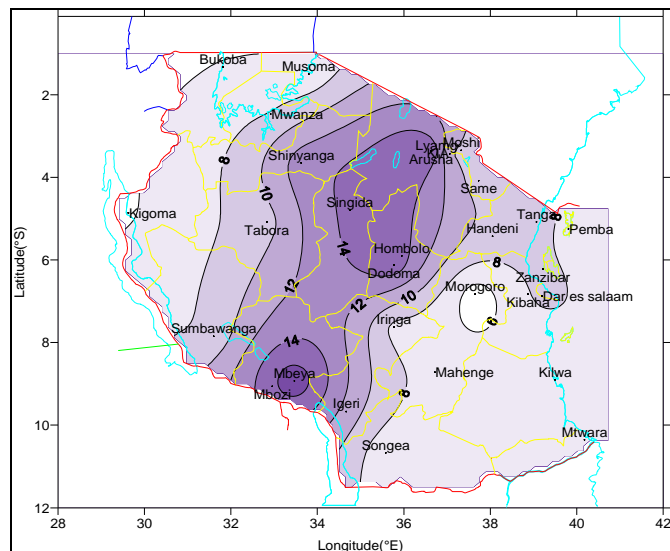


Figure 4: September 2011 Mean wind speed (km/hr)

Mean wind speeds across the country ranged between 3 km/hr to 14 km/hr during the month of September. Windy conditions traversed over parts of southwestern highlands, central and northeastern highlands as indicated in Figure 4.

AGROMETEOROLOGICAL SUMMARY

Land preparations for the *Vuli* season in bimodal sector started over most areas following the early onset. There was early and adequate soil moisture supply over most parts of the country with higher levels registered over Lake Victoria basin, western parts and northern coast boosting increased field activities. However, planting of maize and beans were major field activities reported over parts of Kagera and Mara regions, with beans in Kagera region approaching flowering stage and in good condition contrary to the less effective off-seasonal soil moisture supply obtained over a few areas in the unimodal sector.

Pastures and water availability for livestock and wildlife were observed below average levels over parts of northeastern highlands, central and southwestern highlands, though they will be boosted by the early onset and generally expected normal to above normal rains.

HYDROMETEOROLOGICAL SUMMARY

Water levels in lakes, dams, and discharges in rivers including their respective catchments were low but will be boosted by the early onset and generally expected normal to above normal rains.

ENVIRONMENTAL SUMMARY

During September the country continued to experience generally cool to cold temperatures, giving comfortable conditions for the coastal belt which is normally warmer at this time of the year.

EXPECTED SYNOPTIC SITUATION DURING OCTOBER 2011

During the month of October 2011, the Azores High and Siberian high together with the associated Arabian ridge are expected to intensify. St. Helena high is also expected to intensify thus allowing westerly winds over the western parts of the country. On the other hand, the Mascarin high is expected to relax slightly. This will result into a tight gradient near the Tanzania Coast and low level easterly wind convergence. SSTs from central to eastern equatorial Pacific Ocean are expected to be below average. Neutral SSTs conditions are expected to prevail over central Indian Ocean while slightly warmer conditions are expected over southwestern Indian Ocean. Low level winds convergence are expected to dominate over the Lake Victoria basin and western regions. The above configuration is expected to enhance the outward movement of ITCZ and moisture thus contributing to spreading of rainfall activities over bimodal areas.

EXPECTED WEATHER SITUATION DURING OCTOBER 2011

Lake Victoria Basin (Kagera, Mwanza, Mara and Shinyanga regions): is likely to feature cloudy to partly cloudy conditions and thundershowers over most areas. Western regions (Kigoma, Rukwa and Tabora regions): These areas are expected to experience enhanced thundershowers. However, eastern parts of Tabora region are expected to feature mainly few showers and thunderstorms in the first half of the month. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Unguja and Pemba): The areas are expected to experience rain showers with cases of enhanced thundershowers. Central areas (Dodoma and Singida regions): Mainly dry conditions with occasional rain showers are expected during this month. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): are expected to feature some showers. Occasionally enhanced thundershowers may occur. Southwestern highlands (Southern

Rukwa, Iringa and Mbeya region): Mainly dry conditions with occasional light rain mainly over the high grounds areas. Southern Coast (Mtwara and Lindi regions): Partly cloudy conditions, isolated cases of light rains are expected during this month. Southern region (Ruvuma region): Mainly normal dry season.