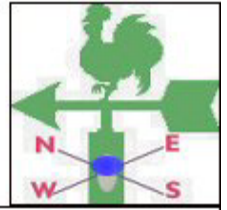




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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HIGHLIGHTS

- Most farmers across the country during the period were through with harvesting activities
- Much of the country is expected to experience low temperatures

SYNOPTIC SUMMARY

During the first half of the month of July 2010 northern hemisphere high pressure system (Azores and Siberian anticyclones) relaxed while the southern hemisphere systems (Mascarene and St. Helena anticyclones) intensified keeping the rain zone i.e. Inter-tropical Convergence Zone (ITCZ) over the northern part of Africa. However, in the last quarter of the month of July, the northern systems showed intensification thus allowing the ITCZ to move slightly southwards. Sea Surface Temperatures (SSTs) over the south-western Indian Ocean were generally warm. Mainly southerly low level wind flow was observed over most parts of the country. During this period the East African Ridge was also persistently strong over the country.

WEATHER SUMMARY

RAINFALL

The country was seasonally dry except for a few localized areas of northern coast and over high grounds in the northeastern highlands. The highest amount of rainfall recorded during the month was 32.3 mm at Pemba followed by Lyamungo 14.8 mm. A few other stations recorded rainfall less than 10 mm.

MEAN AIR TEMPERATURE

During the month under review cool temperatures were experienced over much of the country with only a few areas of the coastal region and its hinterlands, parts of Shinyanga and western regions reporting temperatures exceeding 28 °C as indicated in Figure 1A.

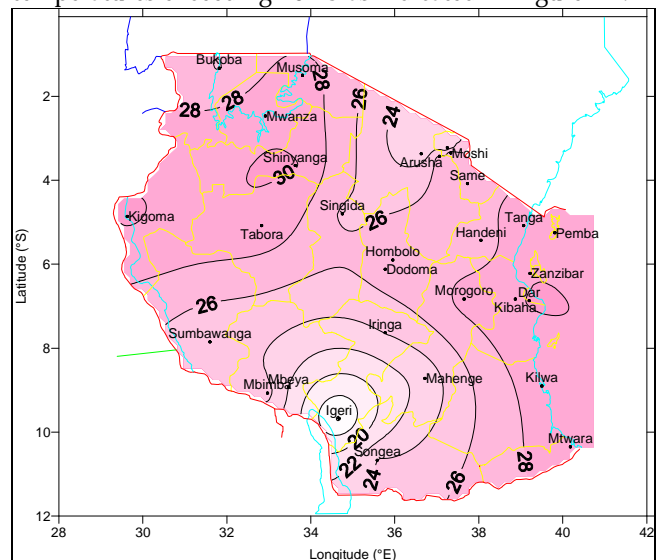


Fig 1A: July 2010 Mean Maximum Temperature (°C)

Mean maximum air temperatures records ranged between 15°C and 30°C. The highest absolute maximum temperature of 30.9°C was recorded at Shinyanga during the second dekad of the month. Igeri over southwestern highlands, recorded the lowest day time values in the second dekad with a maximum temperature of 13.9°C.

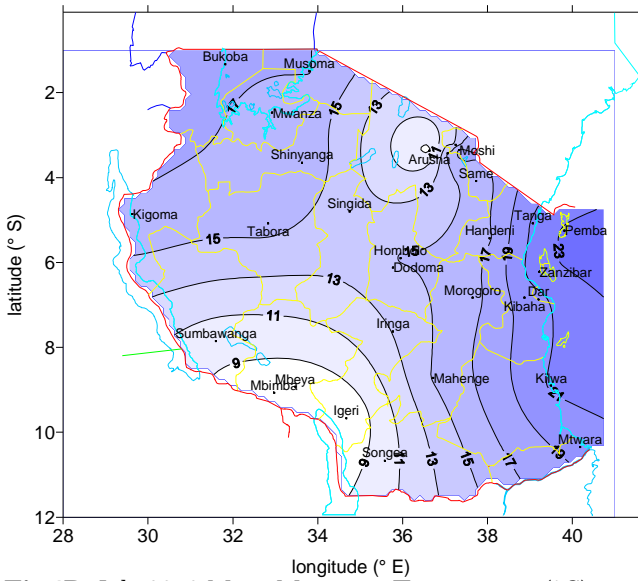


Fig 1B: July 2010 Mean Minimum Temperature (°C)

Mean minimum air temperatures recorded ranged from 7°C to 23°C as shown in Fig 2B. The lowest value of mean minimum temperature recorded was 7.1°C at Igeri over the southwestern highlands while the highest value of 23.2 °C was reported at Pemba in the northern coast.

MEAN SUNSHINE HOURS

Sunshine duration records across the country during July show that the mean bright sunshine hours ranged from 4 hrs/day over northeastern highlands to about 10 hrs/day over central, southwestern highlands and western areas as shown in Figure 2.

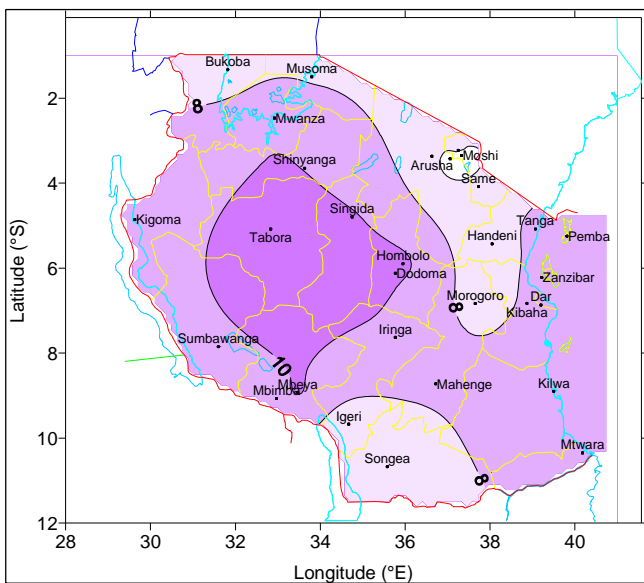


Fig 2: July 2010 Mean Sunshine Hours (hrs/day)

MEAN WIND SPEED

Mean wind speeds across the country ranged from 3 to 11 km/hr during the month as shown in Figure 3. Some parts of southwestern highlands experienced wind speeds exceeding 11 km/hr. Low wind speeds of below 5 km/hr were recorded over some parts of Morogoro, Songea, Shinyanga, Tabora, Rukwa and Lyamungo. Higher wind speed coupled with drier conditions enhanced prospects for occurrences of dust devils, wind erosion, and higher evaporation rates particularly over central region.

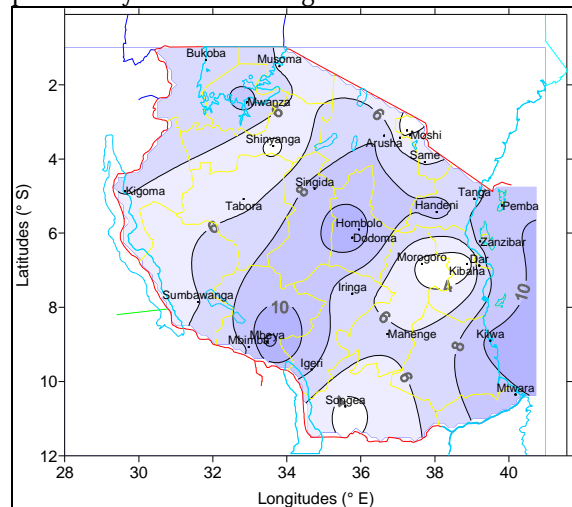


Fig 3: July 2010 Mean wind speed (km/hr)

AGROMETEOROLOGICAL SUMMARY

During the month of July 2010 most farmers across the country during the period were through with harvesting activities. The rest were finalizing harvesting as observed over unimodal and bimodal areas as both have recently ended their cropping season. Likewise over Njombe the harvesting activity was also in the final stage as usually being characterized by the effect of high altitude condition that lengthens crop maturity and drying up. Generally good harvests were reported over most areas of the country. Very few areas that have reported below average harvests are mainly located over central, southern coast and northeastern parts of the country.

Market supply for cassava over several areas continued fairly well.

Pasture and water availability are good and livestock conditions are normal.

HYDROMETEOROLOGICAL SUMMARY

Water levels in lakes, dams and river flows have started declining due to the prevailing dry season, thus water for human and industrial usage and hydro power generation should be used sparingly.

ENVIRONMENTAL SUMMARY

Cool temperatures over most areas in the country have led to comfortable conditions although over high ground areas cold temperatures were uncomfortable as reported from Mbulu and Meru districts (northeastern highlands) and southwestern highlands.

EXPECTED SYNOPTIC SITUATION DURING AUGUST 2010

Sea Surface Temperature (SSTs) conditions are projected to remain warm over south-western tropical Indian Ocean during the month of August. Occasional intensification of the Azores high pressure is likely to allow the Lake Victoria trough to become more active and inclined towards the Lake Victoria basin. This condition could lead to a possibility of relatively convective environment and occasional rainfall over the region.

The East African Ridge emanating from St. Helena and Mascarene anticyclones is expected to maintain low level divergent flow pattern over the country resulting into generally dry conditions. Injection of cold air mass from the southern parts of Africa is expected to persist, hence maintaining cool to cold conditions over most parts of the country.

EXPECTED WEATHER DURING AUGUST 2010

Lake Victoria basin (Kagera, Mwanza, Mara regions and Kibondo areas): is expected to feature slightly enhanced rainfall with isolated thunderstorms. Shinyanga is likely to remain dry during the month of August 2010. Western regions (Kigoma and Tabora regions): are expected to feature normal dry conditions with a likelihood of few outbreaks of showers over Kigoma region.

Southwestern highlands (Rukwa, Mbeya and Ruvuma regions): are expected to feature some light rains over high grounds including southern Iringa region. Temperatures are likely to remain low (chilly mornings and nights) mainly over high grounds. Northern coast (Dar es Salaam, Coast and Tanga regions, the Isles of Unguja and Pemba): are expected to feature intermittent light rains during the month. Central areas (Dodoma and Singida regions): are expected to feature mainly dry and windy conditions. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): are expected to experience mainly dry conditions with some drizzle over high grounds. Southern coast (Mtwara and Lindi regions) is expected to experience dry conditions with irregular rains mainly over coastal belt.

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