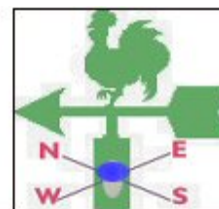




TANZANIA METEOROLOGICAL AGENCY



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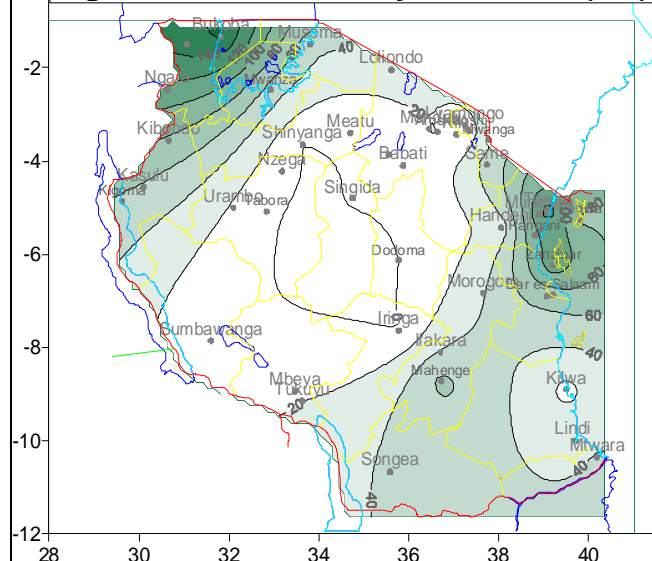
HIGHLIGHTS

- Over northeastern highlands the soil moisture deficit conditions delayed the seasonal land preparations.

SYNOPTIC SUMMARY

The development of a tropical cyclone over the Arabian Sea, off Oman coast together with warm patches developed over the equatorial central Indian Ocean denied moisture along Tanzanian coast. The Southern Hemisphere systems (the St. Helena and Mascarene highs and East African ridge) were fluctuating in intensity influencing little moisture for formation of rain over the country. The Northern Hemisphere systems, the Azores and Siberian anticyclones together with Arabian ridge were intensifying, thus pushing the Inter Tropical Convergence Zone (ITCZ) southwards, which was diffused. The presence of Near Equatorial NET) and the warm SSTs over northwest Indian Ocean influenced isolated rain showers over northern coast and northeastern highlands. The weak trough observed over Lake Victoria basin continued to be a dominant feature, influencing rain showers and thunderstorms there.

Fig. 1: October 2007 Monthly Total Rainfall (mm)



The highest reported rainfall amounts were 162 mm at Bukoba Met. Station, followed by Tanga 129 mm, Zanzibar 113 mm and the rest in the sample stations recorded rainfall below 40 mm.

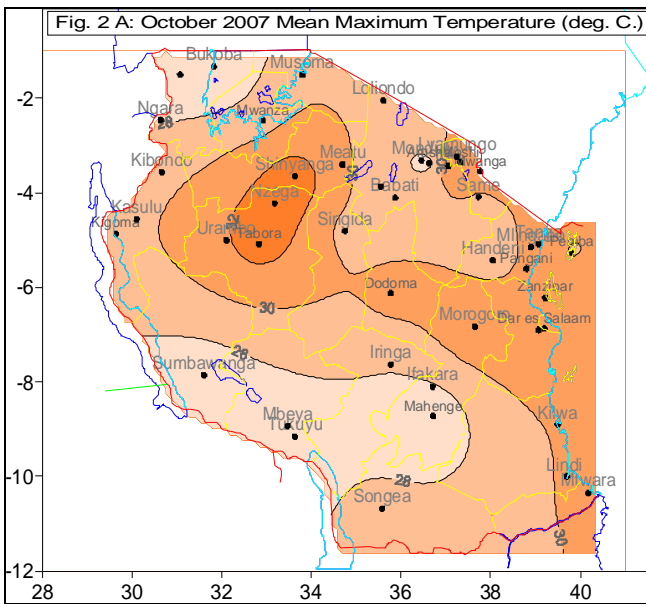
MEAN AIR TEMPERATURE

Temperatures continued to rise during the month, indicating a normal trend for the period. The spatial mean maximum and minimum values are shown in Figs. 2A and 2B respectively. The mean maximum temperature ranged between just above 33 °C and just below 26 °C as indicated in Figure 2A. The highest mean maximum temperature recorded during the month was about 33.4 °C at Shinyanga that persisted during the first 20-days of October, while the lowest was about 26 °C over the southwestern highlands.

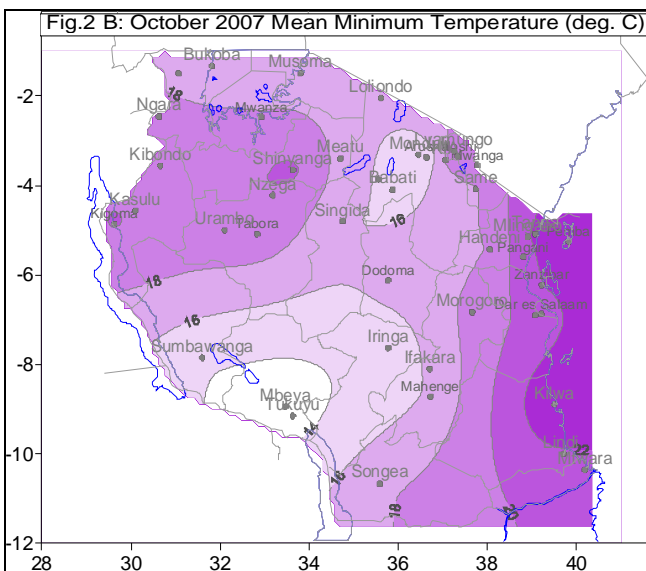
WEATHER SUMMARY

RAINFALL

During October seasonal rainfall recorded over parts of Lake Victoria basin, northern coastal belt and northeastern highlands experienced isolated rainfall activities. Central areas remained generally dry, which is a normal feature for October as shown in Figure 1.



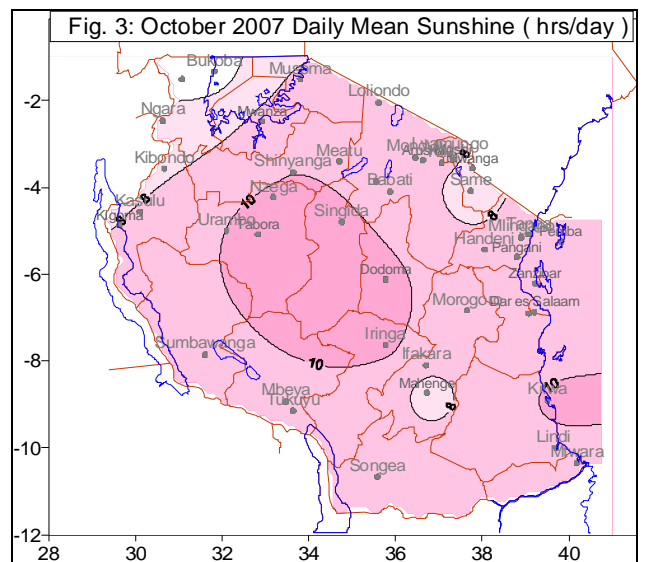
The mean minimum air temperature ranged from just below 14 °C to slightly above 22 °C. The lowest value of the mean minimum temperature was about 12.9°C observed at Mbeya station, while the highest value was about 24 °C recorded at Kilwa in the southern coast as shown in Fig. 2B.



During the first and second dekads of October Mbeya reported a 10-day mean minimum temperature of about 12 °C, as compared to 10°C experienced during the month of September 2007. Thus, generally a rising trend of temperatures across the country was maintained in October.

MEAN SUNSHINE HOURS

Sunshine hours across the country during October indicates that the duration of mean bright sunshine hours ranged from about 5 hrs/day to 10 hrs/day as shown in Figure 3. Longer bright sunshine hours occurred over central areas (Dodoma and Singida regions) including eastern parts of Tabora region, northern parts of Mbeya and Iringa regions. Shorter durations of bright sunshine hours (around 5) were recorded over Kagera region and 7 hours in Mahenge and Same districts.

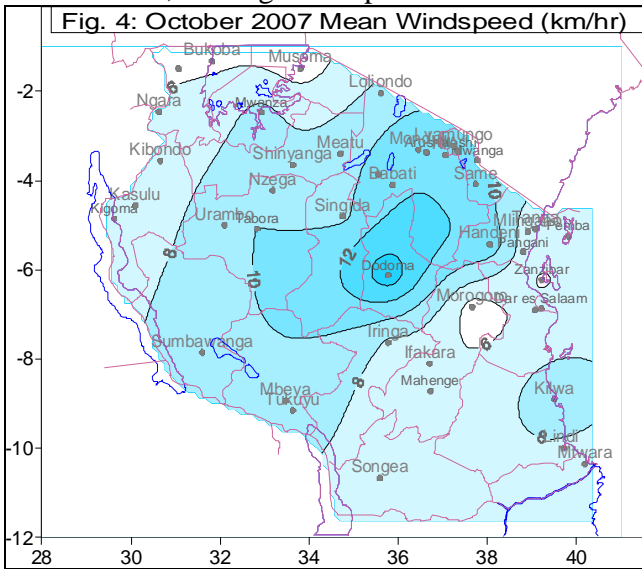


MEAN WIND SPEED

During the period mean wind speed across the country ranged between about 5 to 15 km/hr as indicated in Fig. 4. Central areas and its neighborhoods experienced windy conditions where wind speeds exceeded 12 km/hr. The core of maximum wind speed of about 15 km/hr was recorded at Dodoma Met station. Low wind speeds at about 5 km/hr were recorded over Mara, Kagera and Morogoro areas.

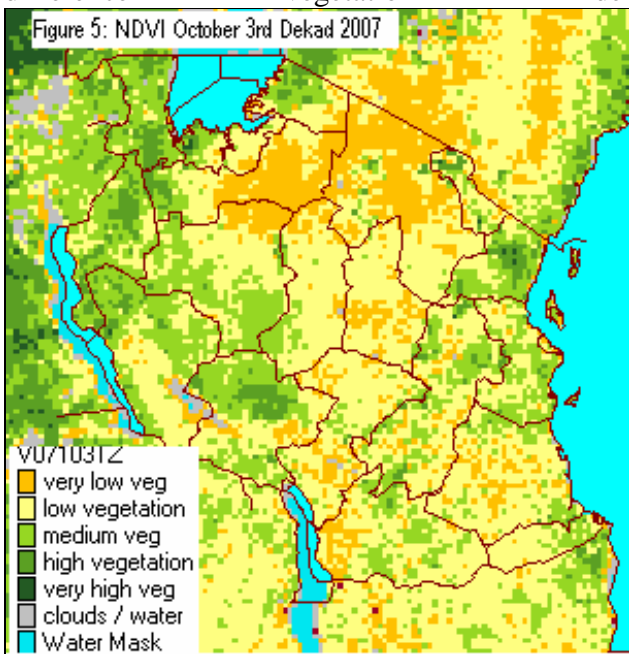
Compared to the September wind strength and pattern did not change much during October. As noted earlier, dry conditions over central areas, southwestern and northeastern highlands areas

increased prospects for occurrences of dust devils, wind erosion, and higher evaporation rates.



SATELLITE INFORMATION

Mean vegetation condition during the third dekad of October is indicated in Figure 5 a NOAA satellite imagery depicting the normalized difference vegetation index.



Higher values of the vegetation index appear over Lake Victoria basin, western areas and parts of northern coastal belt. Spots of low values of the

index occurred over southern and central areas while very low values concentrated over eastern Shinyanga region together with most parts of Manyara and Arusha regions (areas with high potential of wilting vegetation cover).

AGROMETEOROLOGY

Soil moisture was generally at low levels mainly in the first two dekads of the month, delaying some field activities like land preparation and planting. This situation hindered smooth growing of early planted crops at vegetative stage as reported mostly over Lake Victoria basin. Likewise, over the northeastern highlands the soil moisture deficit conditions delayed the seasonal land preparations.

Growth of cassava and sweet potatoes over several areas across the country continued well at various stages, while market supply for both crops was abundant.

Pasture conditions and water availability for livestock and wildlife over the central, northeastern highlands, and southern areas were decreasing in supply as the dry season persisted.

HYDROMETEOROLOGICAL SUMMARY

Water levels in lakes and dams, and water flows in rivers particularly over the northeastern areas continued to decrease following inadequate *Vuli* rains. Water for domestic and industrial purposes should be used sparingly.

ENVIRONMENTAL SUMMARY

Temperature was generally rising and windy conditions continued to prevail. Fire hazards (bush and wildfires in particular) were still rampant in the dry areas of the country.

**EXPECTED SYNOPTIC SITUATION
DURING NOVEMBER 2007**

Northern Hemisphere systems (the Arabian ridge, Siberian and Azores anticyclones) are expected to intensify while the Southern Hemisphere systems (St. Helena, Mascarene, component of ITCZ) to influence showers and thunderstorms. The Near Equatorial Trough (NET) over Northwest Indian Ocean is expected to persist thus, influencing rainfall activities over northern coast, coast and northeastern highlands.

**EXPECTED WEATHER SITUATION
DURING NOVEMBER 2007**

Northern coast and hinterland (Tanga, Dar es Salaam, Coast and Morogoro regions together with Zanzibar and Pemba Islands) and Northeastern highlands (Arusha, Kilimanjaro and Manyara regions) are expected to feature partly cloudy conditions with rain showers over some areas.

Southern coast (Lindi, Mtwara and Southern Morogoro regions) is expected to feature partly cloudy conditions with rain showers over few areas. Lake Victoria basin (Kagera, Mwanza and Mara regions) together with Western areas (northern Kigoma region and western Tabora) are expected to feature partly cloudy conditions with showers and thunderstorms. Southwestern highlands (Iringa, Rukwa and Mbeya regions), Western areas (Southern Kigoma and Tabora regions), Southern areas (Ruvuma region) and Central areas (Dodoma and Singida regions) are expected to feature partly cloudy conditions with rain showers over few areas.