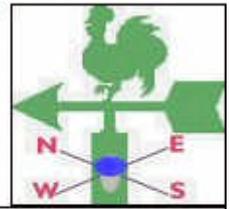




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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HIGHLIGHTS

- Rains that started to taper off towards the end of the period especially over central and western areas indicate an ending of the 2004 seasonal rains
- Paddy crop over the Coast region is generally in poor condition due to poor soil moisture supply.

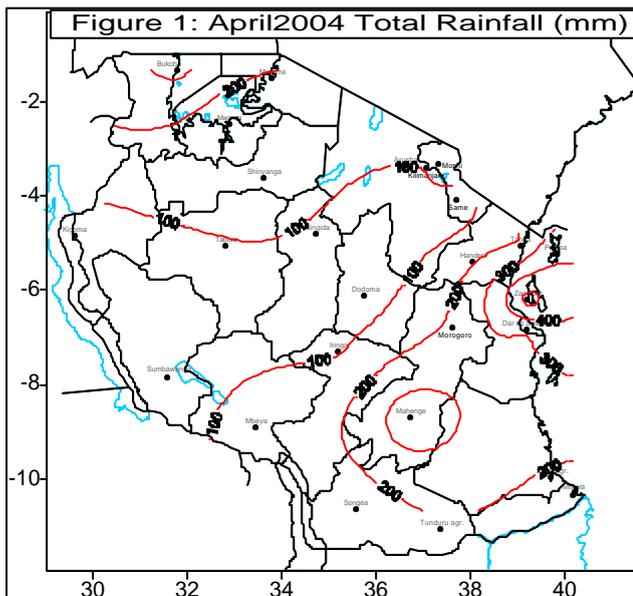
SYNOPTIC SUMMARY

During the month of April, the Azores anticyclone was strong while the Arabian ridge was weak. The St. Helena anticyclone and the East African ridge were strong. The Inter Tropical Convergence Zone (I.T.C.Z) was active over the country.

WEATHER SUMMARY

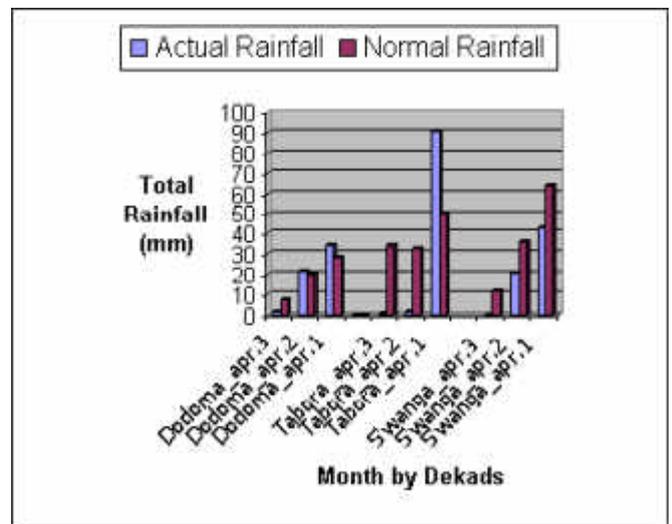
RAINFALL

During the period total rainfall above 200mm was recorded over the eastern sector and parts of Lake Victoria Basin. Highest total rainfall of about



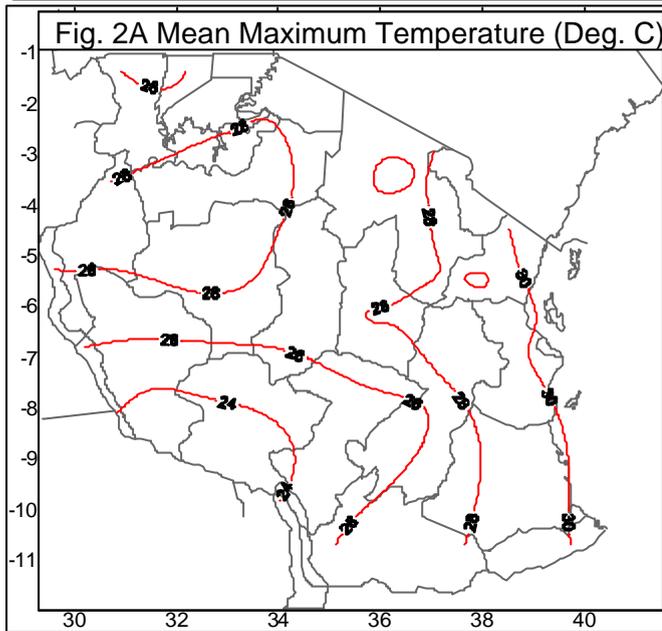
549mm was recorded at Zanzibar Airport where 352.9mm was recorded during the 1st 10-days of the month. Over unimodal rainfall areas rains started to taper off towards the end of the period especially

over central and western regions – an indication of end of the seasonal rains. As shown in Figure 1, areas enclosed within the 100mm isohyets depict areas that were generally dry during the period. Such areas aroused concern over bimodal areas to the south of Kilimanjaro, Manyara and Arusha regions currently experiencing *masika*. Same recorded the lowest amounts of about 47mm, as total for the period. Remaining areas enclosed in the 100mm curve depict a normal seasonal decline of the rains for the period. The Graph below shows the 10-day rainfall records from Dodoma, Tabora and Sumbawanga stations compared to normal values.

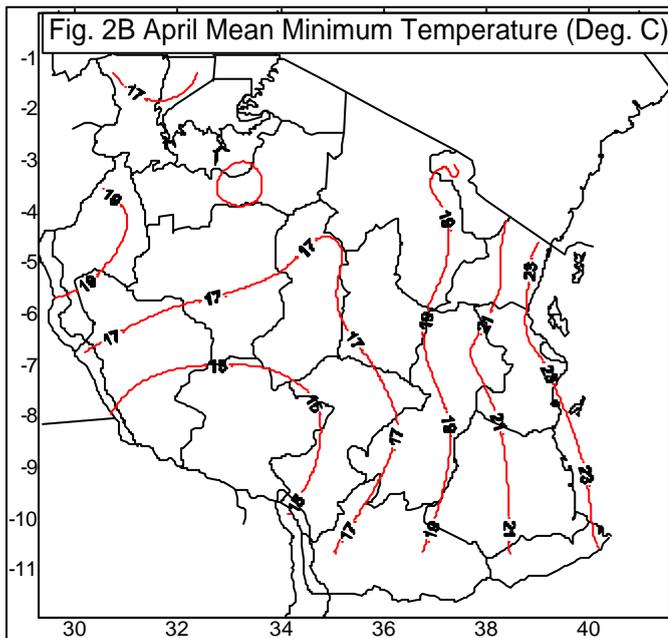


MEAN AIR TEMPERATURE

During February mean air temperatures in terms of maximum and minimum observations in a day appear in Figures 2A and 2B respectively.

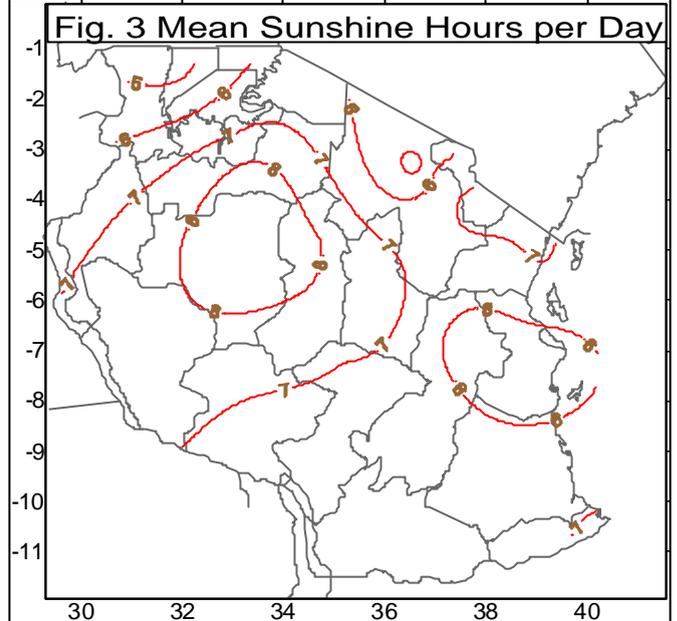


Mean maximum temperatures ranged between 30 °C and 24 °C while mean minimum was between 16 °C and 23 °C. Both Figures 2A and 2B depict high values over the eastern sector of the country with some localized patches over the midlands. On the other hand, altitude and latitude effects generally modify ranges of lower values in a given season. During the period lower values were over southwestern areas. Compared to the situation during March, overall cooler conditions have started to set in as maximum temperatures dropped by 1 to 2°C during April.



SUNSHINE HOURS

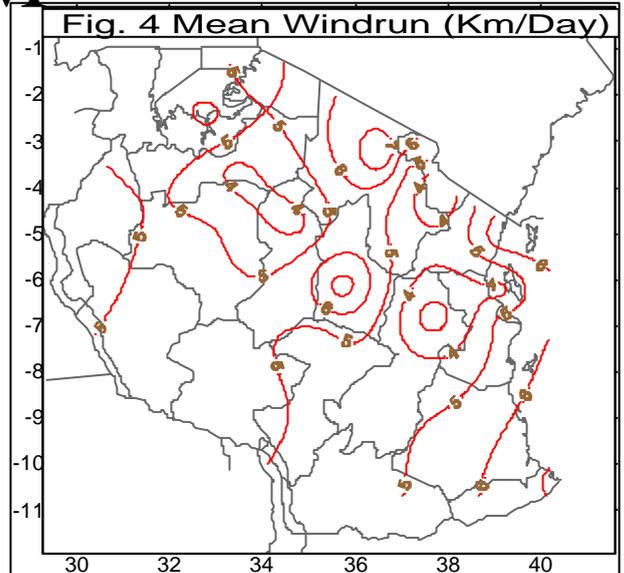
During the month mean sunshine hours across the country ranged from about 5 to just above 8 hours/day as shown in Figure 3. Shorter durations of bright sunshine, around 5 hrs/day, were



experienced over parts of eastern and northeastern areas and western Lake Victoria Basin. Maximum bright sunshine hours, above 8, were experienced over central and western areas.

MEAN DAILY WINDSPEED

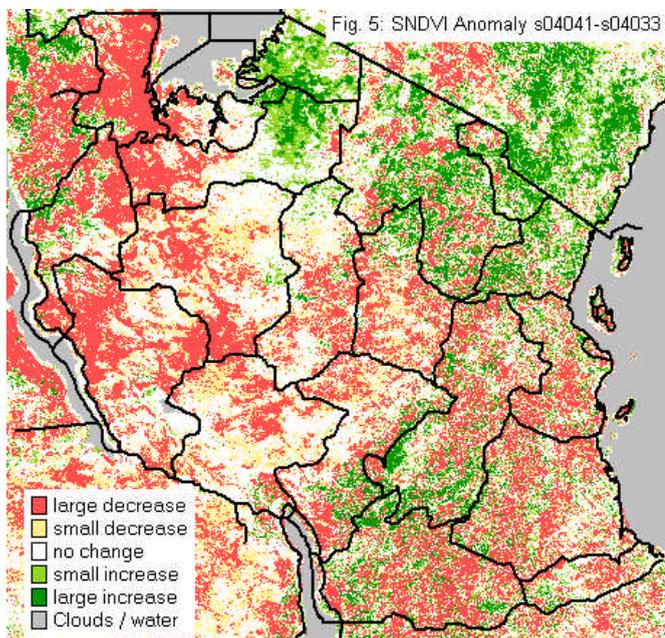
Mean wind speeds across the country ranged



from about 4 to just above 8 km/hr as shown in Figure 4. Pockets of localized areas that observed maximum speeds appear over central and northeastern regions, and over the tips of southern and northern coast areas. Minimum speeds appear as pockets in Morogoro, Same and Singida areas sandwiched in between the higher speed highlighted earlier.

SATELLITE INFORMATION

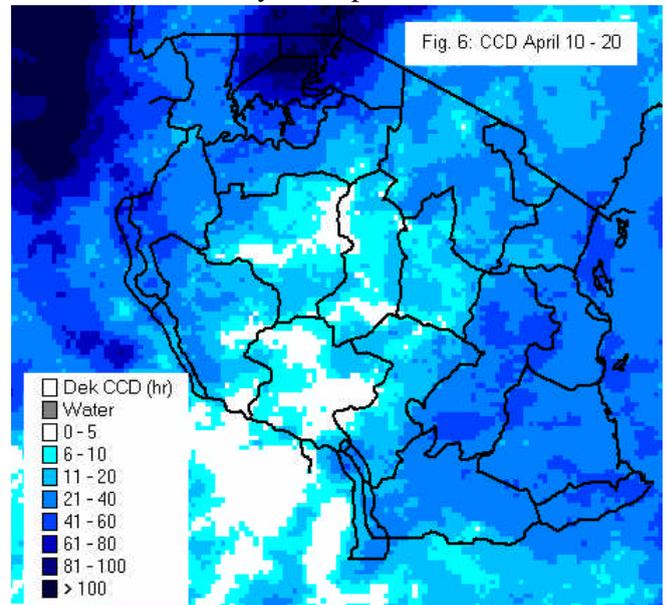
Satellite information during the month appears as



in Figure 5, Normalized Difference Vegetation Index (NDVI) anomaly from the Spot satellite depicting NDVI difference between 1st 10day during April mean index and the 3rd 10-day mean index during March. Large increases in greening of vegetation appear over the northeastern areas including Mara region areas where increase in soil moisture from seasonal rains was picking up. In addition highland areas of southern Morogoro region recorded maximum greening. Coloured in red are areas that depicted decreases in greening of vegetation due to a decline in soil moisture replenishment mainly in parts of central areas and the western sector of the country.

Cold Cloud Durations (CCD) appears as shown in Figure 6 covering April 10 – 20th. Though the first 10-days during the period deep cloud activities were

very pronounced over the whole country, at the end of the second 10-days of April durations had



declined to only a maximum of about 130 hours that concentrated over the Lake Victoria Basin. The absence of deep cold cloud activities in tandem with a tapering of seasonal rains did set in over central and parts of southwestern areas.

AGROMETEOROLOGY

There was generally continued replenishment of soil moisture across the country, especially over the bimodal rainfall areas benefited crops in the fields ranging from the late vegetative to flowering stages. Over unimodal areas field crops have ripened and over western areas harvesting is ongoing. Over cooler highland areas in the unimodal areas field crops are generally in the wax ripeness stage and depict good yield prospects. Maize has reached ripeness over central, southwestern and southern areas. Over western areas especially Kigoma and western Tabora region harvesting is ongoing. Weeding of beans (a second crop) is going on over bimodal areas especially over western parts of Lake Victoria Basin. Over low lands and flood plains paddy in the vegetative stage to flowering was being weeded and generally in moderate to good state. Over the Coast region paddy generally in poor condition as a result of poor soil moisture replenishment experienced through the

season so far will limit final yields. Cassava at various stages to maturity, some harvesting continued to supply town markets. Sorghum stands at flowering to maturity stages and generally in good state over central and southern areas. Crop conditions countrywide are gauged between moderate to good state and as such yield prospects for a higher production level than last year is anticipated.

HYDROMETEOROLOGY

Rainfall that fell during the month contributed significantly to water levels in rivers and other water reservoirs in some parts of the country. Water levels in rivers and dams for water supply and electricity generation have improved slightly over the areas receiving rains.

ENVIRONMENTAL

The moderately low wind speeds and the spreading dry conditions (central areas), which prevailed during the month reduced prospects for diseases such as colds, coughs, pneumonia and asthma.

EXPECTED SYNOPTIC SYSTEMS FOR MAY

The East African ridge and St Helena anticyclone will remain intense. The Arabian ridge will weaken while the Azores anticyclone will strengthen. The Inter Tropical Convergence zone (I.T.C.Z) will be to the north of equator.

WEATHER OUTLOOK FOR MAY

The Lake Victoria basin will experience partly cloudy conditions with showers and thunderstorms over few areas and sunny periods. Northeastern highlands and northern coast will have partly cloudy conditions with showers over few areas and sunny periods. Southwestern highlands, southern coast, southern, central and western areas will experience partly cloudy conditions with sunny periods.

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