TANZANIA METEOROLOGICAL AGENCY

MONTHLY WEATHER BULLETIN

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JUNE - HIGHLIGHTS

- Over the coastal belt an interlude of advection of moisture influx from the Indian Ocean occurred during the last week of June created wetter than normal conditions during this time of the year.
- Poor food crop yields over the northern coast belt and northeastern areas prevailing scenario.

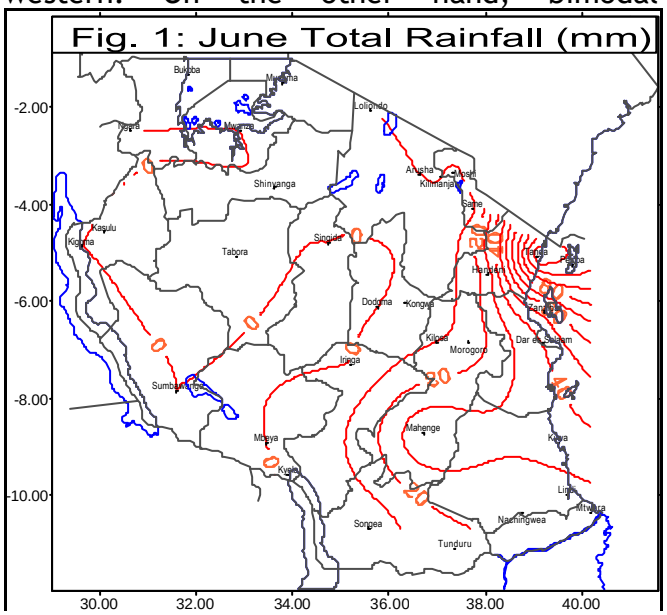
SYNOPTIC SUMMARY

During the month of June, the East African ridge was strong and maintained low level diffluent flow over the country. The Mascarene anticyclone and Azores anticyclone were intense. The St. Helena anticyclone was weak.

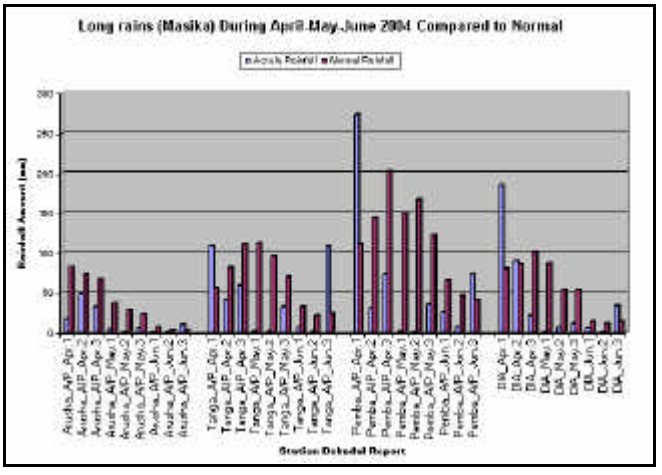
WEATHER SUMMARY

RAINFALL

The month of June was normally dry over unimodal rainfall areas of central, southern, southwestern highlands and western. On the other hand, bimodal



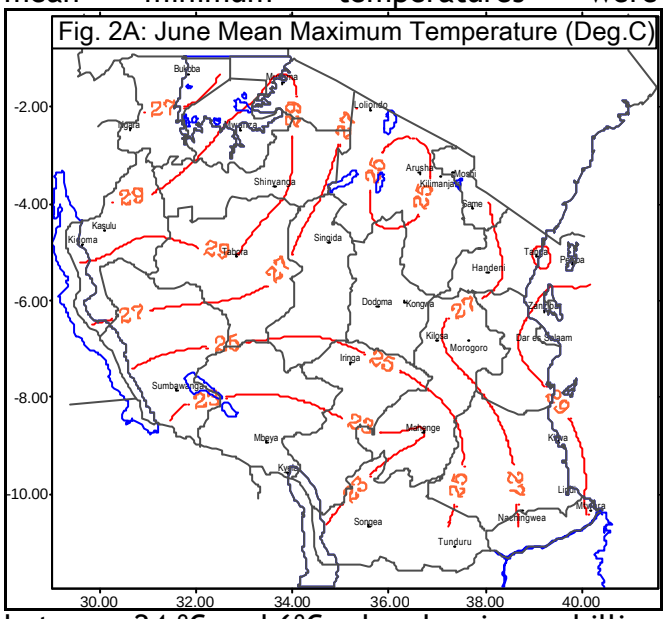
rainfall areas over Lake Victoria Basin, northeastern were also generally dry thus registering the ending of the 2004 long rains (masika). In coastal belt an interlude of advection of moisture influx from the Indian Ocean occurred during the last week of June created wetter than normal conditions during this time of the year. Mtwara A/P reported 24.3mm, International airports of Dar-es-Salaam and Zanzibar reported 40.7mm and 53mm respectively, Pemba A/P 106.9mm while Tanga A/P had the maximum at 118.3mm as depicted in Figure1. Looking at the graphs below, cessation of the long rains over northeastern areas was generally early by 2-3 weeks. Over the northern coastal belt the April to June rainfall performance was dominated by prolonged dry spells with an outburst of rainfall during the third dekad of June.



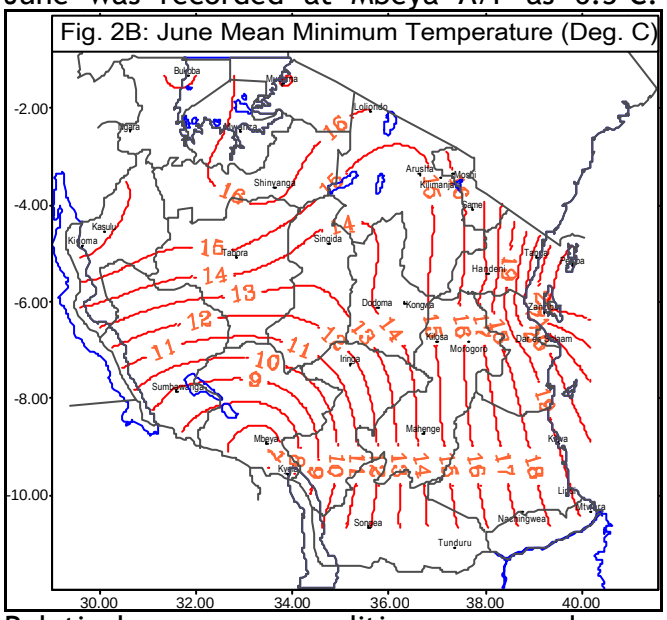
MEAN AIR TEMPERATURE

Mean air temperatures for the month of June depicting maximum and \ minimum observations during the period appear in

Figures 2A and 2B respectively. Mean maximum temperatures ranged between 29 ºC and 23 ºC a drop of 2 degrees compared to the situation during May. On the other hand, mean minimum temperatures were



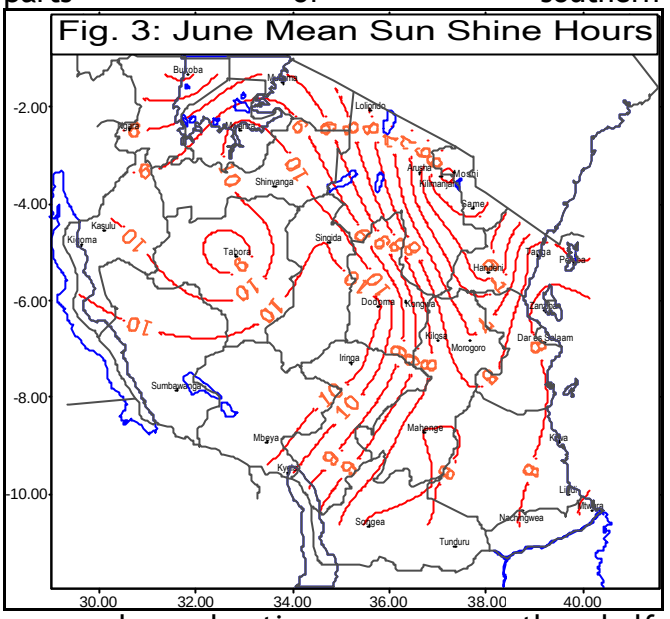
between 24 ºC and 6ºC, also showing a chilling drop in minimum temperature by 2ºC. The lowest mean minimum temperature during June was recorded at Mbeya A/P as 6.3ºC.



Relatively warmer conditions occurred over the northern coastal belt.

SUNSHINE HOURS

During June mean sunshine hours across the country ranged from about 5 to just above 10 hours/day as shown in Figure 3. Northeastern highlands have continued to depict the shortest duration of bright sunshine around 4 hours generally as a result of concentration of the seasonal cloudy activities over the area. Longer bright sunshine, engulfed central, western, southwestern and parts of southern



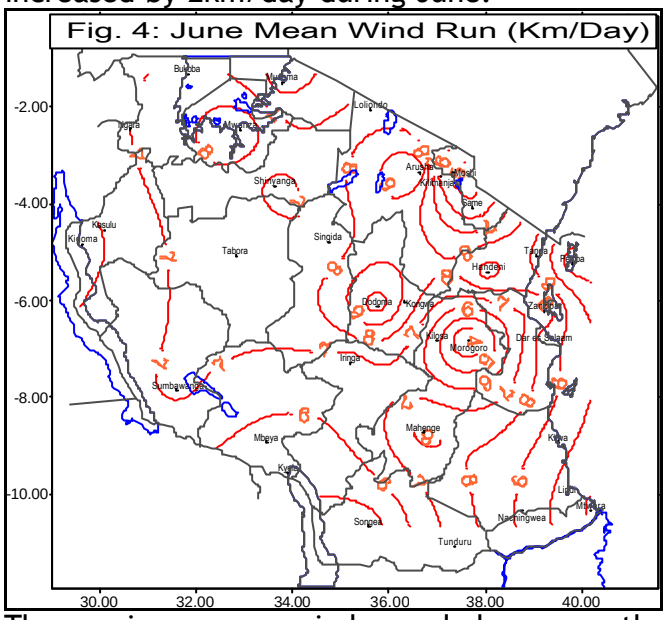
areas where durations were more than half day light time. The normal dry season has enhanced persistence of clear skies over these areas.

MEAN DAILY WINDSPEED

Mean wind run across the country during the month of June from observations at a height of about 1.5meters ranged from 4km/day to a maximum of 11km/day during June as shown in Figure 4. The mean maximum across the country was recorded over the northern coastal belt as well as over central areas and parts of northeastern highlands. The highest record was that from Pemba A/P at about 11km/day.

On the other hand, pockets of low wind speeds appear in between the maximum centers on the leeward side of mountain range such as the record from Morogoro meteorological station on the foot of Uluguru mountains,for instance recorded 2km/day. Compares to the situation during the month of May, June observations generally depict the same

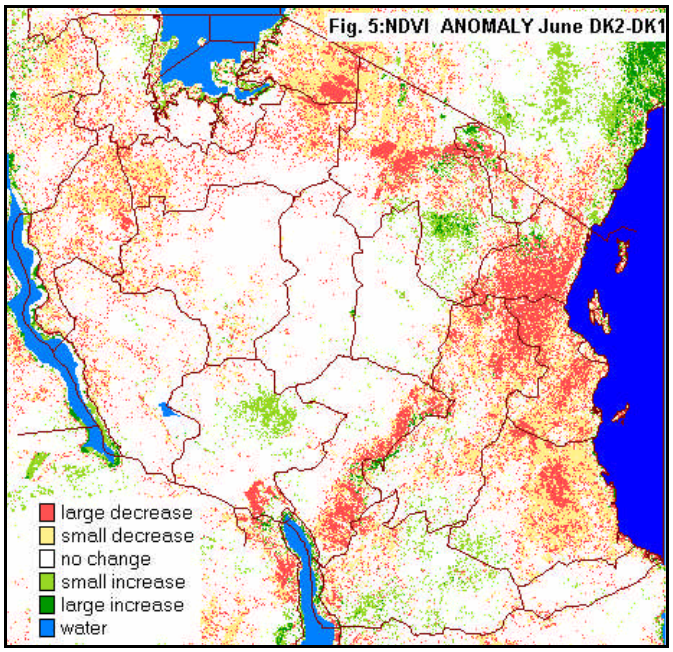
pattern but as May maximum magnitudes increased by 2km/day during June.



The maximum core wind speed show a north-south orientation to signify the establishment of organized seasonal low-level flow from south-easterlies.

SATELLITE INFORMATION

Figure 5 depicts anomalies of the Normalized Difference Vegetation Index (NDVI) from Spot satellite sensor indicating the difference that occurred between the second and the first dekad of the month of June. Large decreases in the greening index appear over eastern sector of the country, parts of northeastern highlands and along the stretch of Udzungwa mountain ranges (Iringa region). Parts of northeastern and northern coastal belt depicting large decrease in the greening index are areas of concern as thus indicate some degree of wilting on late planted annuals.



Patches of slight increase in the vegetation index generally are reflections from perennial vegetation. On the other hand, areas of no change on large scale depict the drying vegetation, given the setting in of the dry season.

AGROMETEOROLOGY

Harvesting activities on late grown crops were being concluded over unimodal areas during the month of June and started on ripened crops over bimodal areas over Lake Victoria Basin, northeastern areas and northern coastal belt. Prolonged soil moisture deficits experienced so far over parts of bimodal areas have resulted into realizing notable poor crop performance particularly on maize and beans. Reports from areas of northeastern, south of Lake Zone and much of northeastern areas (Arusha, Manyara, Kilimanjaro) and eastern parts of Shinyanga region, Coast and Tanga regions indicate that - maize crop yields are down by about 25%, while beans in some parts of northeastern areas wilted completely. Beans in the northeastern highlands were badly attacked by an unidentified disease that turned the leaves yellow-dry.

Paddy growth over the Coast has also been hit by soil moisture inadequacy across the season. Report from Kizimbani Agromet Station in Zanzibar, described that cassava crop which is in all stages of development and perennials benefited from the splash replenishment of soil moisture resulting from the seasonal rains during the last week of June. FEWSNET and RATIN bulletins of June reported that food

crop prices have started to fall because of fresh food crops especially maize reaching local markets.

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 general water supply and electricity generation have improved slightly over the areas that received rainfall.

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 JULY

The St. Helena anticyclone and Mascarene anticyclone will intensify. The East African ridge will remain intense and maintain low-level diffluent flow over the country. The Azores anticyclone is expected to weaken.

WEATHER OUTLOOK FOR JULY

The Lake Victoria basin will experience partly cloudy conditions with thunderstorms over few areas and sunny periods. Northern coast, high grounds of northeastern highlands and islands of Zanzibar and Pemba will have partly cloudy conditions with rains over few areas and sunny periods. Southwestern highlands, central, southern coast, southern and western areas will have partly cloudy conditions with sunny periods.

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