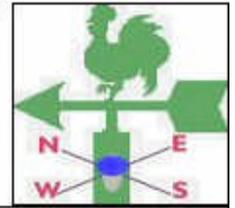




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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APRIL - HIGHLIGHTS

- Below normal rains in most parts of the country
- Minimum total rainfall for the period was recorded over central, southern and southwestern

SYNOPTIC SUMMARY

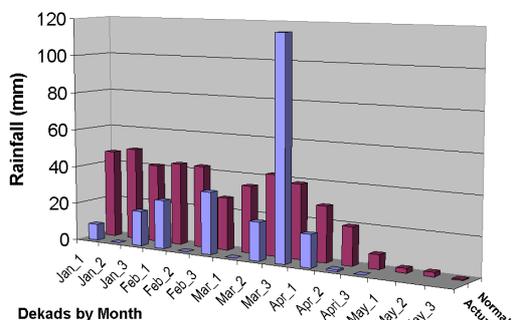
During the month of April, the Azores anticyclone and the Arabian ridge were strong. The Mascarene anticyclone and the St. Helena anticyclone were also strong. The Inter Tropical convergence Zone (I.T.C.Z) was active over the northern parts of the country.

WEATHER SUMMARY

RAINFALL

The normally wet month was characterized by below normal rains in most parts of the country. Highest total monthly rainfall

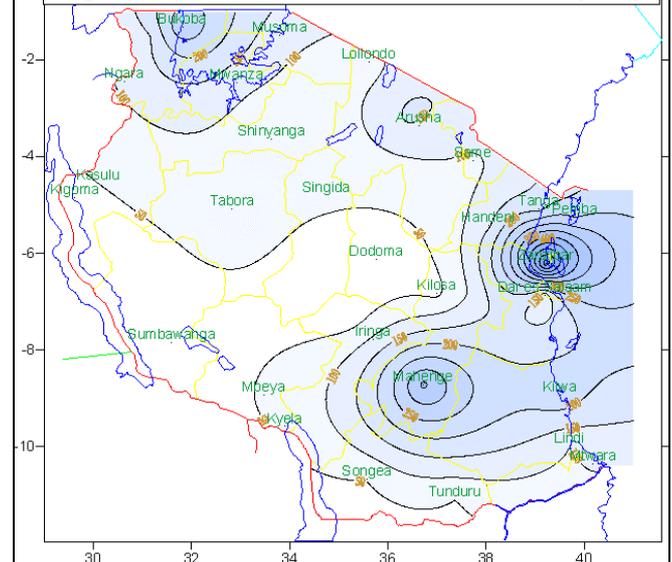
Graph 1: Dodoma Rainfall Performance from Jan - April 2005



recorded was at Zanzibar airport (633.1mm) whereby 330.4mm were received in two consecutive days (a record measure since 1952) and caused massive flooding in Zanzibar municipality. Other records were

Mahenge Meteorological station (361.3mm) and Bukoba airport (292.2mm) as shown in Figure 1. On the other hand, minimum total rainfall for the period was recorded over central, southern and southwestern, unimodal rainfall areas where seasonal rains are on the decline but were characterized by poor distribution both in space and time. Graph 1 depicts the Dodoma airport rainfall performance a pattern that exemplified many locations in the

Fig. 1 APRIL 2005 TOTAL RAINFALL (MM)

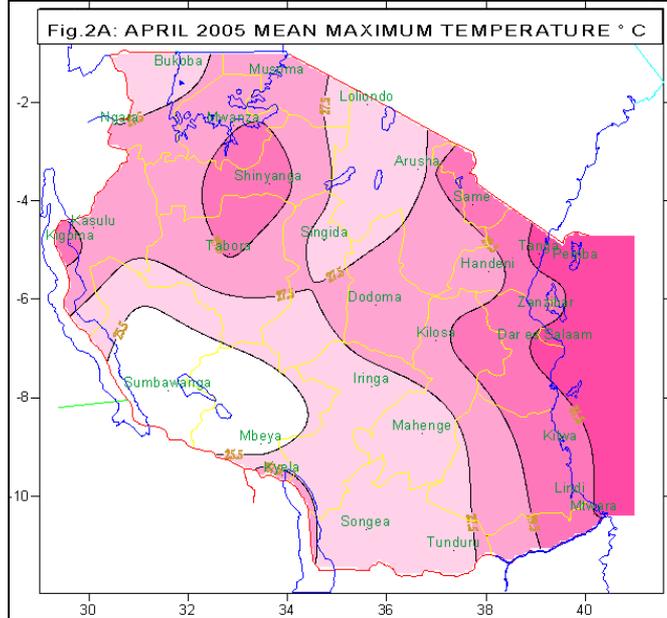


area. On Graph 1, blue spikes refer to actual rainfall whereas red spikes are the long term 10-day average rainfall. An early termination by about 20-days of the seasonal rains over central areas can be seen to have set in during the second 10-day

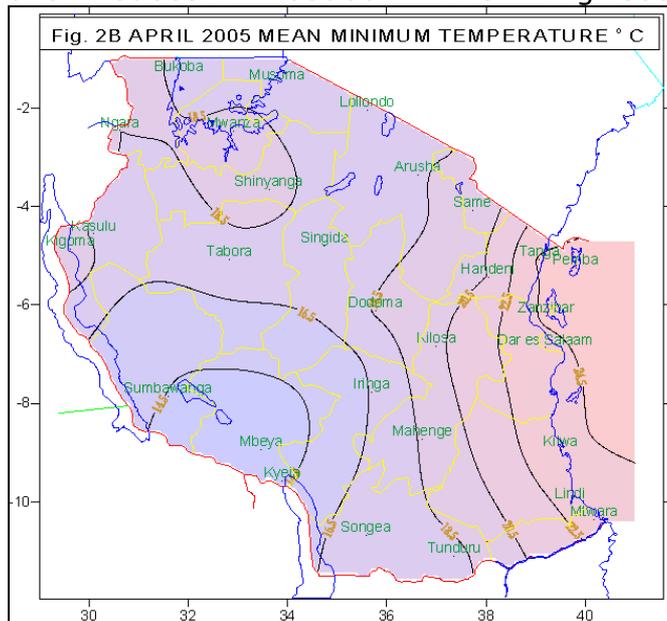
period in April shortening further the 2004/05 rainfall season.

MEAN AIR TEMPERATURE

Temperatures for the month of April depicting air mean maximum and minimum observations during



the period appear in Figures 2A and 2B respectively. Observed mean maximum temperature ranged between 31.5°C and 25.5°C as shown in Figure 2A. Higher mean maximum temperatures above 31°C were over the eastern coast. The highest

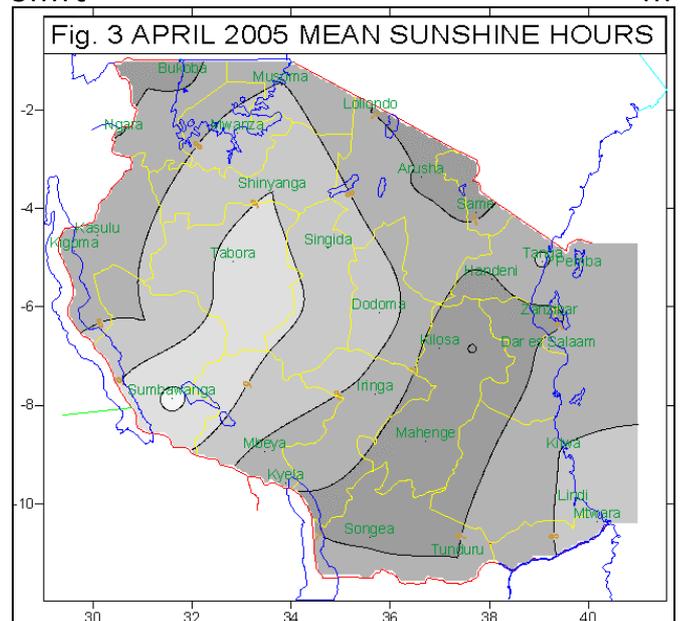


extreme value of 32.2°C was recorded at Tanga airport, a drop by 1.6 °C compared to that during March. Mbeya airport in southwestern highlands, recorded the lowest mean maximum temperature of 23.8°C.

On the other hand, mean minimum air temperatures as shown in Figure 2B, ranged from 14.5 to 24.5°C but the extreme minimum temperature of 12.9°C was recorded at Mbeya airport. A general drop in temperature highlights a cooling trend, an indication of the approach of the cool season over the eastern Africa region.

SUNSHINE HOURS

Figure 3 indicates the spread of mean sunshine hours during April observed across the country, showing a general shift in

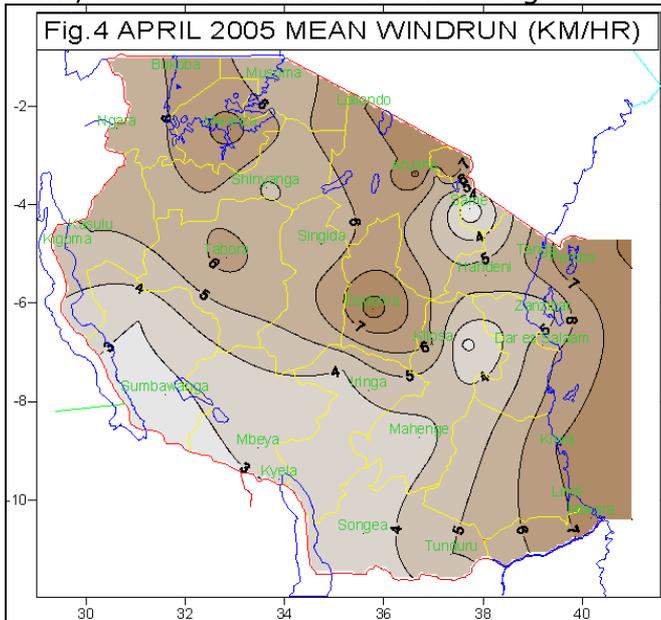


maximum hours occurring over the southwestern areas from northeastern. Maximum exposure to bright sunshine, also increased from around 8 hours during March to just over 10 hours recorded at Sumbawanga Meteorological station in April. The longer durations of sunshine hours were a result of a general seasonal decline in cloud activity over central, southern,

southwestern and western areas during this time of the year.

MEAN DAILY WINDSPEED

Mean wind run across the country during the month of April ranged from 3km/hr to a maximum of just above 8km/hr as shown in Figure 4

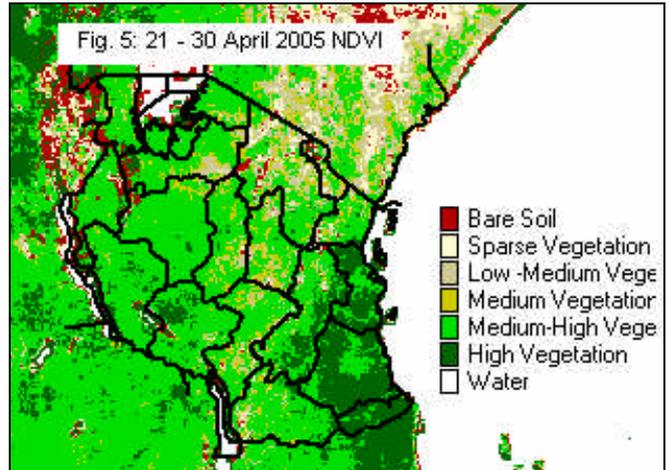


Spots of higher wind speed occurred over central areas, the northeastern highlands and the extreme eastern coast. Overall across the country, wind speeds subdued during the period compared to conditions experienced over the previous months.

SATELLITE INFORMATION

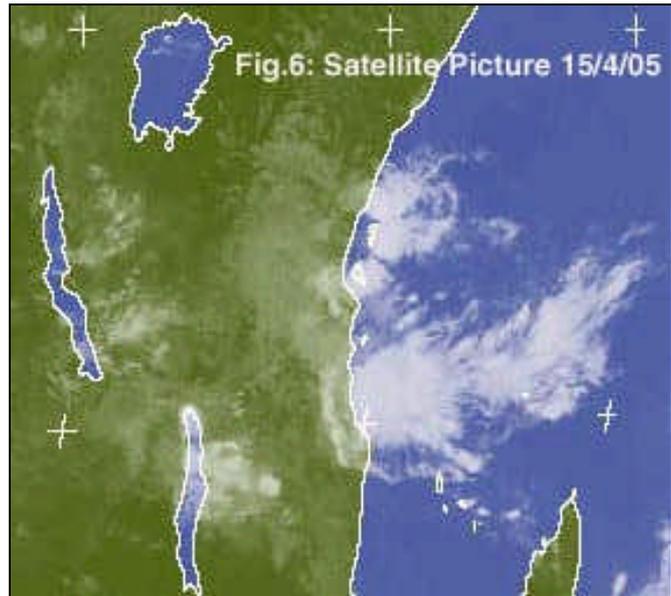
Figure 5 depicts a NOAA satellite picture of Normalized Difference Vegetation Index (NDVI) during the last 10 days of April.

High (greener) vegetation covered Coast, Lindi and Mtwara regions. Sparse vegetation was mostly seen over Northeastern areas and parts of central areas and western areas of Shinyanga region. Most remaining areas of the country



featured a medium level in the coverage of green vegetation.

Figure 6, displays an easterly cloud cover that persisted over the coastal belt of the country on 15/4/05 and was the cause of heavy rains recorded at observation stations as



shown earlier in Figure 1.

AGROMETEOROLOGY

During the month of April soil moisture conditions improved slightly over bimodal rainfall areas whereas unimodal rainfall areas generally observed a declining trend. Harvesting of maize has been completed over western

regions(Kigoma and parts of Tabora) and fair to moderate yields have been realised. Maize crop reached the ripeness stage over central, southern and southwestern areas. Maize yield prospects are good from southern and southwestern areas. Poor yields prevail over central areas (Dodoma and Singida regions and parts of eastern Shinyanga, northern Iringa, western Morogoro) where cereal crops suffered prolonged dry spells during grain filling in January and February reaching permanent wilting level in some places. Over bimodal areas (Lake Victoria Basin, Northeastern areas, Northern coastal belt) *masika* cereal crops are at various development stages to flowering and in poor to moderate state. Yield prospects for field crops so far over northern coast belt are poor in the case of paddy and maize. Cassava is at various stages generally in good state and harvest activities which feed town markets are continuing.

HYDROMETEOROLOGY

There has been only a slight increase in water levels in rivers and water reservoirs due to a generally poor rainfall season. Water for industrial and domestic purposes should be used sparingly.

ENVIRONMENTAL

Localized windy and dry conditions across the country that prevailed during the month, maintained prospects for diseases such as colds, coughs, pneumonia and asthma.

EXPECTED SYNOPTIC SITUATION DURING MAY

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

EXPECTED WEATHER SITUATION DURING MAY

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

Prepared by
TANZANIA METEOROLOGICAL AGENCY
 3rd & 4th Floors - Ubungo Plaza Ltd – Morogoro Road.
 P.O. Box 3056
 Tel. 255 -(0) 22 – 2460706-8 ; Fax: 255 - (0) 22 - 2460718
 E-mail: (1) met@meteo.go.tz (2) agromet_tz@meteo.go.tz
 Dar-es-Salaam UNITED REPUBLIC OF TANZANIA