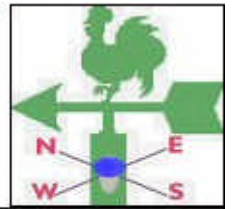




# TANZANIA METEOROLOGICAL AGENCY



## MONTHLY WEATHER BULLETIN

ISSN No: 0856-0919, Volume 7, Issue 2 February 2005

### HIGHLIGHTS

- On going seasonal rains characterized by poor distribution

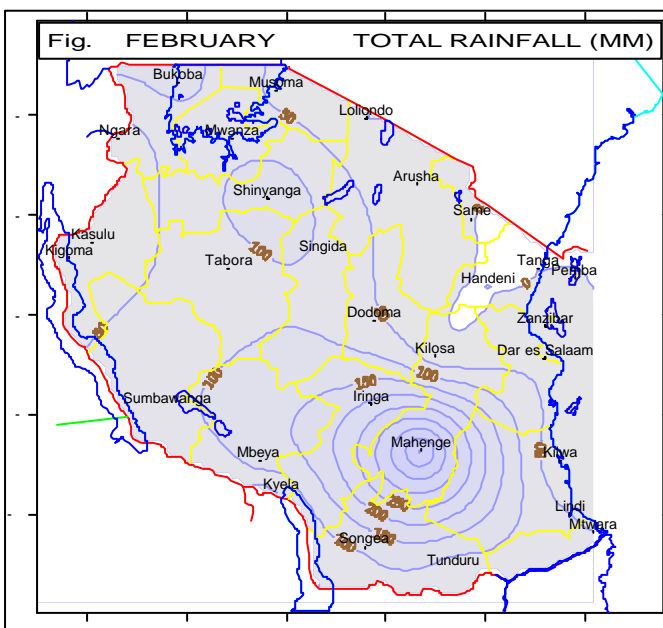
### SYNOPTIC SUMMARY

During the month of February, the Azores anticyclone and the Arabian ridge were strong. The Mascarene anticyclone was weak, whereas the St Helena anticyclone was strong. The zonal component of the Inter Tropical convergence Zone (I.T.C.Z) was active over the southern areas.

### WEATHER SUMMARY

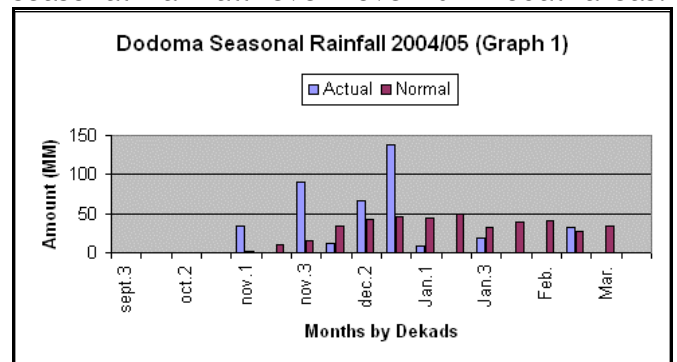
### RAINFALL

During February above normal rainfall was



recorded but over a reduced area covering southern and southwestern parts of the

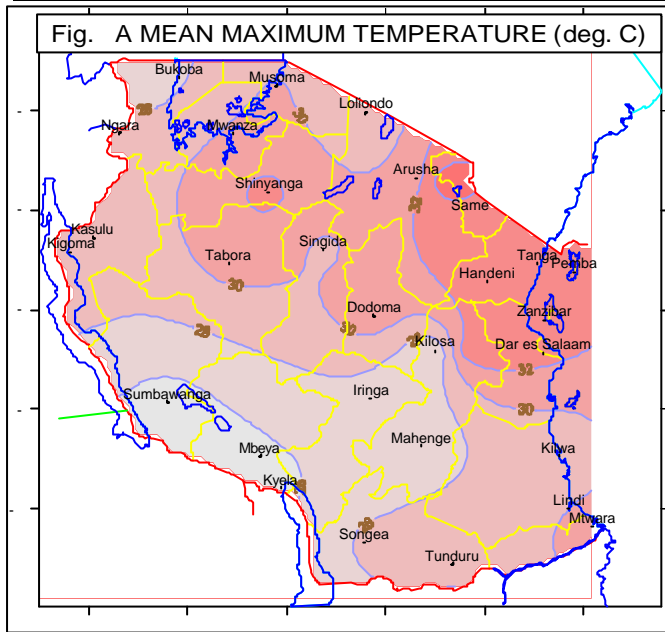
country with the highest monthly total of about 461.7 mm recorded at Mahenge station. Figure 1 shows the monthly total values observed across the country. Dry conditions that have persisted for sometime now over northeastern areas spread southwards engulfing parts of central areas. Dodoma meteorological station recorded a long dry spell during the period as shown in Graph 1 signifying poor distribution of the on going seasonal rainfall even over unimodal areas.



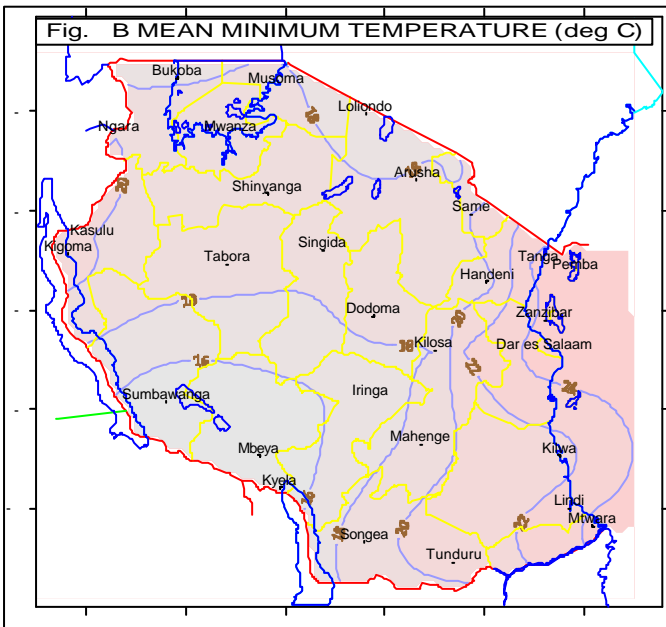
Dry spells were also experienced in Mbeya, Songea, Shinyanga and Tabora.

### MEAN AIR TEMPERATURE

Mean maximum temperature across the country during February is shown in Figure 2A. Hot conditions ranged from 26 °C to 32 °C. High temperatures were observed over eastern areas and parts of northeastern highlands. Highest mean maximum temperature was reported at Moshi airport (34.9 °C).



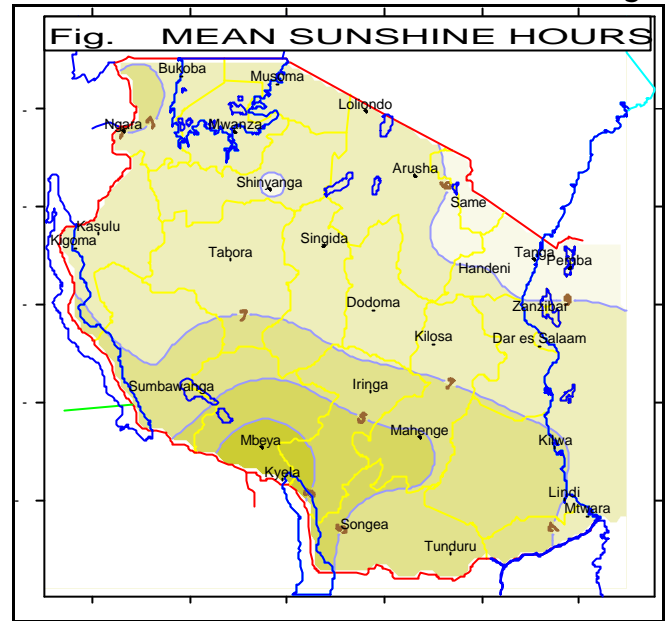
Lower mean maximum temperatures were recorded over the southwestern highlands with Sumbawanga meteorological station reporting 25.0 °C. On the other hand mean minimum temperature profile for February is shown as Figure 2B. Cool conditions ranged between 16 °C and 24 °C indicating a downward trend of higher minimum values compared to the previous month. The eastern



sector exhibited higher values compared to the inland situation.

**SUNSHINE HOURS**

Mean bright sunshine hours during February recorded across the country is shown in Figure 3. Durations of mean bright



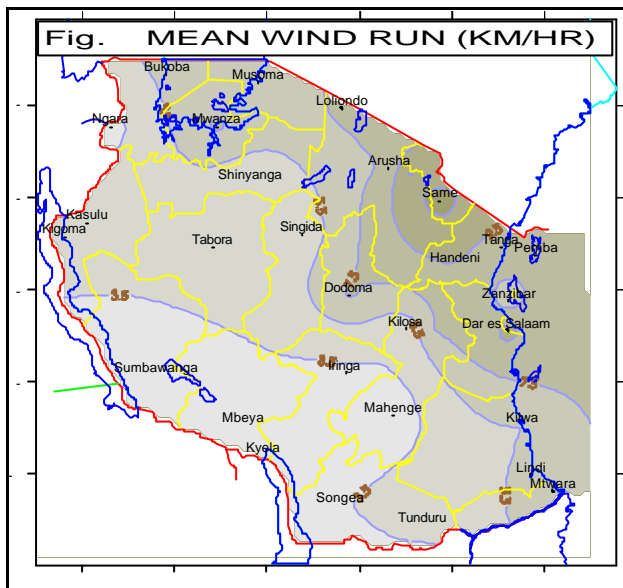
sunshine ranged from around 2 hours to about 10 hours per day, a general decrease by 4 hours on lower value observed during January. Longer bright sunshine hours mainly greater than 10 hours per day, continued to persist over the extreme northeastern corner, whereas shorter bright sunshine hours less than 2 hrs per day in this month was observed close to the south and southwestern border areas of the country, mainly caused by the influx of cold winds from south.

**MEAN DAILY WINDSPEED**

Mean wind speed across the country during February ranged between 2 km/hr and 12 km/hr as shown in Figure 4 below. Maximum values were recorded over the northeastern sector of the country while on the other hand low wind speed values were observed generally over southwestern highlands. Compared to last month, the pattern is the

same though minimum speeds dropped from 4 to an average of 2km per hour.

the country to have been mainly in the south and southwest and patches over parts of central areas. Dry conditions during the period persisted over northern, eastern and western sectors of the country which corresponds to ground data of below normal rainfall.

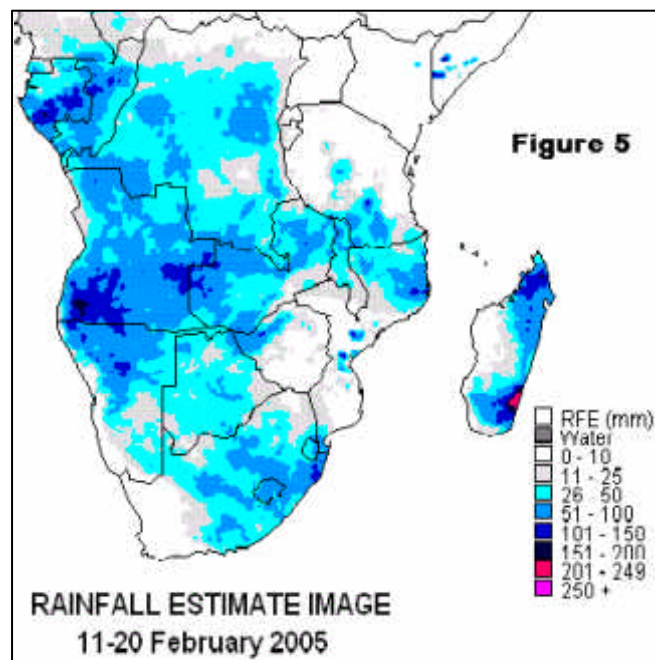


**AGROMETEOROLOGY**

During February soil moisture supply over most parts of the country continued to drop to permanent wilting levels especially on maize. Stunted and wilting maize covered most fields over bimodal areas of magu, shinyanga, Meatu, Karatu, Monduli, Ngorongoro, Arumeru, Rombo Same, Lushoto and Korogwe districts. Over unimodal areas districts that experienced moisture stress include, Dodoma rural, Mbarali and northern Iringa. Adequate soil moisture conditions prevailed over Mahenge district. Field activities ranged from weeding over unimodal areas to land preparation over parts of bimodal areas (Moshi district). Drought tolerant crops such as sorghum and cassava managed to prevail better than maize over central and southern regions. The remaining areas had generally moderate crop performance.

**SATELLITE INFORMATION**

Satellite information is shown as rainfall estimates for the period 11 - 20 February (Fig. 5) suggesting some rainfall activity over the



**HYDROMETEOROLOGY**

The dry spells experienced in February did not help to raise water levels in rivers and water reservoirs. Water for industrial and domestic purposes should be used sparingly.

**ENVIRONMENT**

The slightly increased windy condition across the country that prevailed during the month maintained prospects for diseases such as colds, coughs, pneumonia and asthma.

**EXPECTED SYNOPTIC SITUATION  
DURING MARCH**

The Arabian ridge and the Azores anticyclone are expected to weaken. The St. Helena anticyclone and the Mascarene anticyclone will intensify. The zonal component of the Inter Tropical Convergence Zone (I.T.C.Z) will be active over the southern sector of the country.

**EXPECTED RAINFALL SITUATION  
DURING MARCH**

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

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