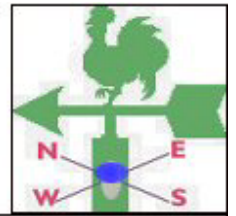




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

ISSN No: 0856-0919, Volume 13 Issue No 4

April 2012

HIGHLIGHTS

- Adequate soil moisture supply received during the month, enhancing crops mostly at vegetative to tasseling stage over the bimodal rainfall areas, in the unimodal areas harvesting has started.
- Flooding was experienced during the month along river Mara in Mara region claiming lives and causing heavy loss of property including dozens of livestock and hectares of crops at vegetative stage.

SYNOPTIC SITUATION

During the month of April 2012, southern hemisphere high pressure cells, St Helena and Mascarin anticyclones maintained their strength while Siberian high and the associated Arabian relaxed slightly. This maintained the rain-making mechanism i.e. Inter-Tropical Convergence Zone (ITCZ) in the country though it was diffused over most parts of the country. Slightly cool Sea Surface Temperature (SSTs) conditions were observed over the eastern Indian Ocean while slight warming was observed over Southwestern Indian Ocean, thus resulting in easterly to south easterly wind flow over the country. This enhanced activities over the north eastern highlands, Lake Victoria Basin and along the Coast areas.

WEATHER SUMMARY

RAINFALL

Most parts of the country mainly in bimodal rainfall areas received adequate rainfall with pockets of below normal rains as over Same area in north eastern highlands, as well as several areas in the unimodal sector in central and southwestern highlands particularly Sumbawanga, Mpanda, Iringa, Tabora, Dodoma and Singida. The highest total amount for the month was 451.3 mm obtained at

Bukoba, followed by Tukuyu 437.2 mm, Mwanza 322.6 mm, Mahenge 318.3 mm, Dar es Salaam Airport 263.7 mm, Arusha 233.0 mm, Pemba 210.8 mm, Lyamungo 209.3 mm, Kilwa 206.2 mm, Kibaha 204.7 mm, Kibondo 180.0 mm, Zanzibar 178.4 mm, Ukiriguru 178.4 mm, Mbozi 143.4 mm, KIA 139.7 mm, Igeri 131.4 mm, Musoma 130.7 mm, Morogoro 124.9 mm, Moshi 122.6 mm, Tabora 119.3 mm, Mpanda 118.0 mm, Mbamba Bay 117.5 mm, Babati 116.4 mm, Tanga 116.3 mm, Matangatuani 117.5 mm, Ilonga 111.0 mm, Mugumu 110.8 mm, Mtwara 110.1 mm. Remaining stations mainly those located over the unimodal sector reported values below 100 mm, as depicted in Figure 1 below.

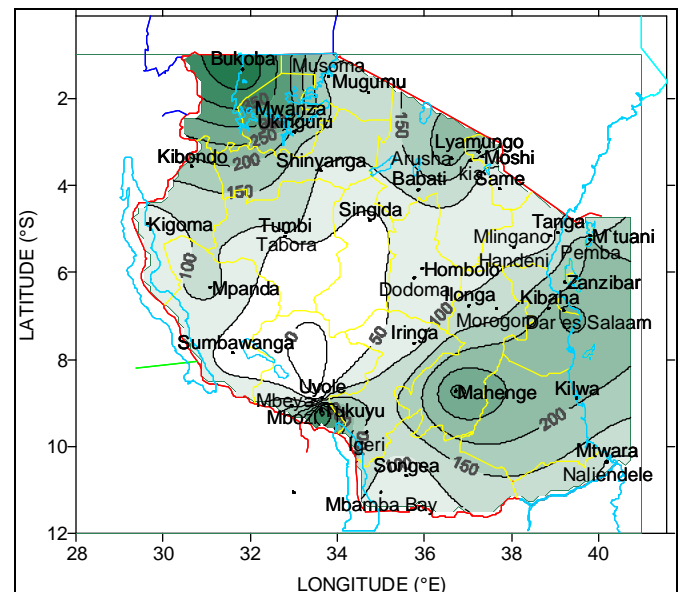


Figure 1: April 2012 Rainfall distribution in (mm)

MEAN AIR TEMPERATURE

Temperatures were lower during the month following extended cloud cover and wet conditions. The mean maximum temperature ranged between 20°C and 32°C as indicated in Figure 2A below. The highest absolute maximum temperature

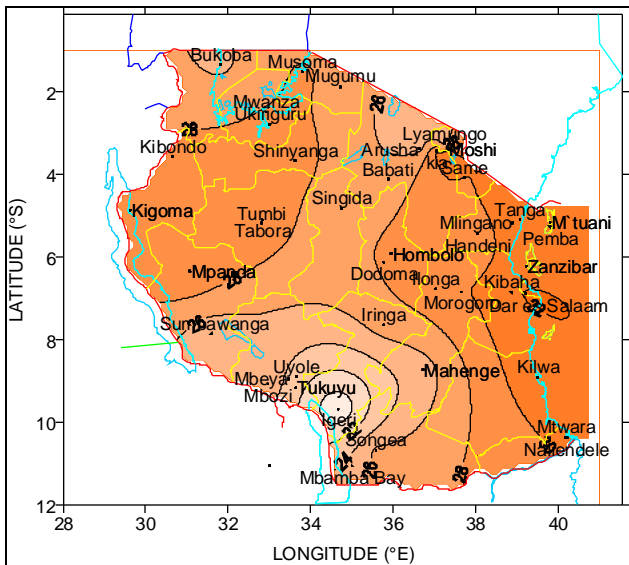


Figure 2A: April 2012 Mean maximum temperature (°C)

Of 32.8°C was reported at Dar es Salaam Airport during the first dekad of the month. The lowest mean maximum temperature was 18.0°C obtained in the third dekad at Igeri in the south western highlands. The mean minimum air temperatures ranged from 12°C to 24°C, whereby the absolute mean minimum temperature value was 9.5°C recorded at Igeri in the south western highlands during the third dekad of the month as depicted in Figure 2B below.

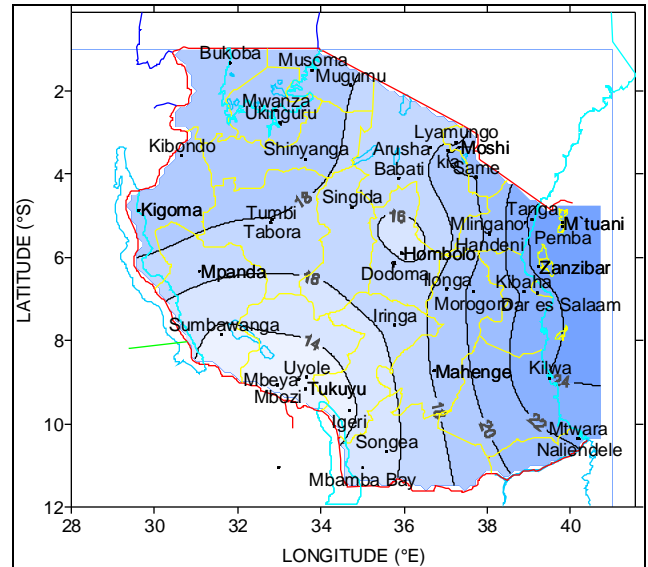


Figure 2B: April 2012 Mean minimum temperature (°C)

MEAN SUNSHINE HOURS

Sunshine durations across the country during April 2012 ranged from about 4 hrs per day as the observed shortest duration over Handeni area in Tanga region to about 9 hrs per day recorded over Dodoma region, as depicted in Figure 3 below.

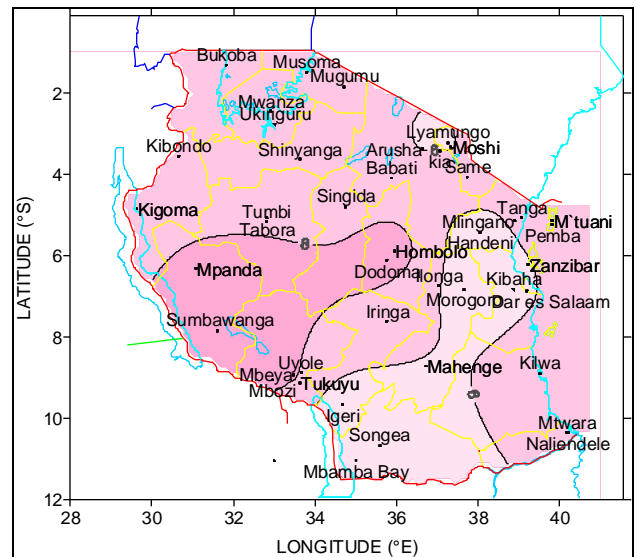


Figure 3: April 2012 Mean sunshine hours (hrs/day)

MEAN WIND SPEED

Mean wind speed across the country during the month of April 2012, ranged from 2 to 10 km/hr as indicated in Figure 4 below. The highest wind speed during the period was recorded over parts of south western highlands particularly Mbeya region, whereas Shinyanga and Coast regions observed the lowest wind speed as in Figure 4 below.

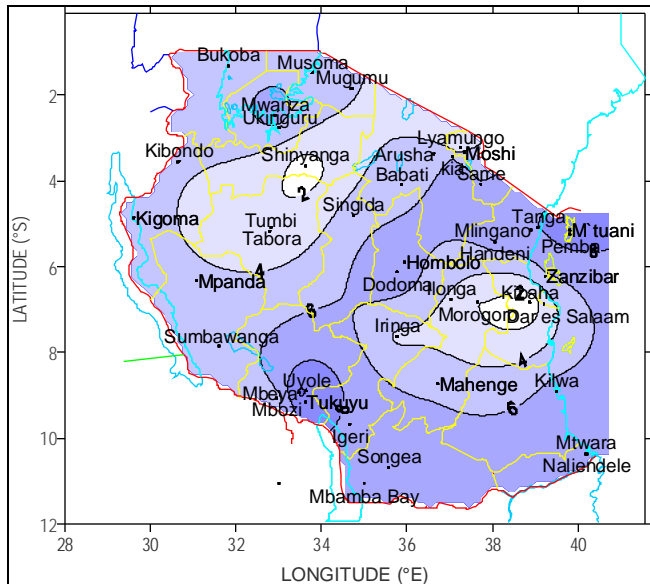


Figure 4: April 2012 Mean wind speed (km/hr)

AGROMETEOROLOGICAL SUMMARY

Adequate soil moisture supply was observed during the month, enhancing crops mostly at vegetative to tasseling stage over the bimodal rainfall areas, while harvesting was started over the unimodal sector. Floods experienced during the month along river Mara in Mara region claimed lives and loss of property including dozens of livestock and several hectares of crops mainly maize at mid vegetative stage. Over the unimodal sector, crops like maize, beans and paddy were progressing well at stages ranging from flowering for late planted crops to harvesting for early planted ones. State of crops was generally moderate to good and harvesting of crops such as maize, beans, paddy and groundnuts have started almost over the entire sector comprising south western highlands, southern, central and western areas of the country. Wheat crop was still at mid vegetative stage and in good state. Likewise,

cotton mainly over bimodal areas particularly Lake Victoria basin was doing well at flowering stage.

Pastures and water availability were generally adequate over much of the country.

AGROMETEOROLOGICAL OUTLOOK

During the month of May favorable soil moisture is expected over bimodal areas which will be beneficial for crops mostly at mid vegetative to wax ripeness stages. In the unimodal areas the expected decrease of soil moisture will be beneficial for both maturity and harvesting of the crops.

HYDROMETEOROLOGICAL SUMMARY

Water levels in lakes, dams and discharges in river flows including their respective catchments were boosted.

ENVIRONMENTAL SUMMARY

Temperatures over most areas in the country have started falling as we go into the cool/cold season, while relative humidity was getting higher mainly over bimodal areas of the country.

EXPECTED RAINFALL SITUATION DURING MAY 2012

During the month of May 2012, the Azores High, the Siberian High and the associated Arabian ridge are expected to relax. The Mascarin and St Helena high pressure systems are expected to intensify thus enhancing the northward movement of the ITCZ out of the country. Near normal SSTs are expected over much of the southwestern Indian Ocean. Slightly cool SSTs are likely to prevail over eastern Indian Ocean. This configuration is bound to favor easterly to south easterly low level flow over most parts of the country.

**EXPECTED RAINFALL SITUATION
DURING MAY 2012**

During this month, mainly normal rainfall condition are expected over the most part of the country: Lake Victoria Basin (Kagera, Mwanza, Mara and Shinyanga regions): These areas are expected to feature normal rains. Western regions (Kigoma, Rukwa and Tabora regions): These areas are expected to experience normal rains. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the Isles of Unguja and Pemba): The areas are expected to experience normal rains with pockets of above normal. Central areas (Dodoma and Singida regions): These will be cold and dry as the rainfall season has come to an end. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): These areas are expected to feature normal rains. Southwestern highlands (Southern Rukwa, Iringa and Mbeya region): These will be cold and dry as the rainfall season has come to an end. Southern Coast (Mtwara and Lindi regions): These areas are expected to feature normal rains. Southern region (Ruvuma region): These will be cold and dry as the rainfall season has come to an end.

Prepared by
TANZANIA METEOROLOGICAL AGENCY
3rd, 4th, & 10th Floors - Ubungo Plaza – 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@meteo.go.tz
Dar es Salaam — UNITED REPUBLIC OF TANZANIA