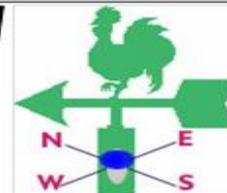




# TANZANIA METEOROLOGICAL AGENCY



## DEKADAL WEATHER REVIEW

No. 8

2005/06 Cropping Season

November 11 - 20, 2005

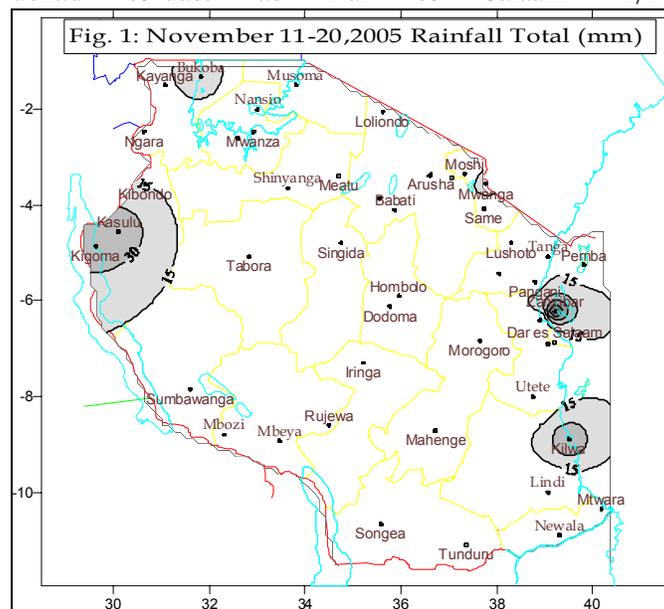
### SYNOPTIC SITUATION

During the period 11–20<sup>th</sup> November, the Azores anticyclone was relatively weak during the early dates of the dekad then became strong towards the end of the dekad, while the Arabian anticyclone remained strong during the dekad. St. Helena and Mascarene anticyclones were generally strong although the Mascarene anticyclone relaxed southeastward but a ridge extending northwestward over Madagascar Island to the southern coast dominated during the dekad. The Inter-tropical convergence zone (ITCZ) remained active over the East African region. The Northeasterly wind flow from the northern Indian Ocean was apparent during the dekad. These flows were more continental with less moisture contents thus the decreased rainfall activities over the northern coast and surrounding areas were evident. The convergence of weak westerly wind flow from the Congo basin and northeasterly wind flow from the northern Indian Ocean over western parts of the country and Lake Victoria Basin, contributed to rainfall activities over Kigoma and Kagera regions during the dekad. Weak southeasterly wind flows from the southeast Madagascar and easterlies from the western Indian Ocean were also evident.

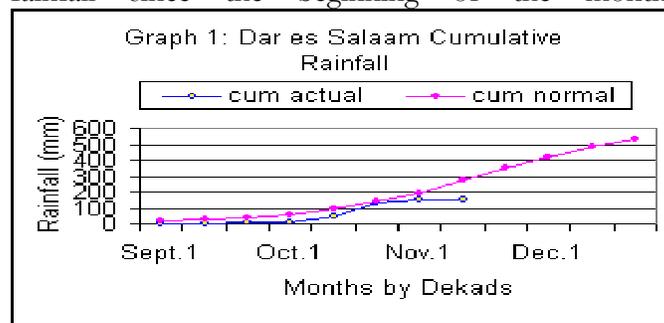
### RAINFALL SUMMARY

During the period, reduced rainfall activities were recorded across the country (Fig. 1). The highest rainfall recorded was 76.5 mm at Zanzibar Airport. Amounts of more than 30 mm were also recorded over Kigoma and Kilwa Masoko. Deterioration in rainfall performance over bimodal areas (Lake Victoria Basin (LVB), northeastern highlands, northern coastal belt and the Islands of Zanzibar and Pemba) lengthened the dry spell conditions, which were observed since the first dekad of November.

Graph 1, compares the current cumulative rainfall to the long-term mean for the period September 1<sup>st</sup> dekad to-date at Dar es Salaam A/P.



The station has been experiencing below normal rainfall since the beginning of the month.



During the dekad (halfway through the short rains season), conditions of below normal cumulative rainfall and poor distribution have been observed over most parts of bimodal rainfall regime. For example, rainfall over Dar es Salaam A/P indicated shortfall of about 80 mm during the past 10-days and about 125 mm since September. However, over unimodal rainfall regime, observed dry conditions and occasional light rains (rainfall less than 5

mm/dekad) over a few areas portray normal trend of the season.

## IMPACT ASSESSMENT

### Agrometeorological

Decreases in soil moisture levels occurred over bimodal rainfall regime due to the observed dry spell. During the period, soil moisture deficits to crops over *vuli* rainfall-receiving area moderately impeded growth and development of crops. Partial wilting of crops mainly maize and beans was reported over districts of Ngara, Bukoba (Misenye and Rubale Wards) in Kagera region and Pangani in Tanga region. Over LVB, maize and beans crops were reported to have reached the late vegetative stage, while over highlands of Tarime in Mara region, maize was at tasseling stage and in good state. Muheza and Lushoto districts in Tanga region had maize and beans at early vegetative stages and in good state. Cassava at various stages continued well over most parts of the country, with adequate supplies to town markets.

Over the unimodal rainfall regime (Central, Western, Southwestern highlands and Southern regions) land preparation was a major activity occupying the farmers so they are strongly advised to plant immediately when it rains.

### Hydrometeorological

Low water levels in rivers and lakes were generally experienced during the period. Water for domestic and industrial purposes should be used sparingly.

### Environmental

Warm/hot conditions have at last come back after an extraordinarily long spell of cool / cold conditions going back to April.

## EXPECTED SYNOPTIC SYSTEMS DURING NOVEMBER 21 – 30, 2005

The Arabian and Azores anticyclones are expected to remain intense over the northern hemisphere while over the southern hemisphere the Mascarene anticyclone is expected to weaken gradually southeastward. The St. Helena anticyclone is expected to remain intense with an axis extending to Guinea coast. The position of the Inter-tropical convergence Zone (ITCZ) is expected to lie over Tanzania while to the west the meridional arm of ITCZ is expected to oscillate gradually westward and become active over Central Africa, Congo and western Tanzania. Westerly wind flows from the Congo basin are expected to prevail. The North East monsoon flows from the Arabian Peninsula are expected to strengthen although there is a likelihood some of the flows to back to the Ocean and others to become easterly on reaching the northern parts of the country. *In this regard, less rainfall activities are expected over the northern coast and northeastern highlands.* The easterly wind flow over western Indian Ocean is expected to persist.

## EXPECTED WEATHER DURING NOVEMBER 21 – 30, 2005

The Lake Victoria Basin and western parts of the country and southwestern highlands are expected to feature partly cloudy to cloudy conditions with showers and thunderstorms over few areas and sunny periods. The northeastern highlands, northern coast and the hinterlands, Zanzibar and Pemba Islands and southern coast are expected to experience partly cloudy conditions with showers and thunderstorms over few areas and sunny periods. Central parts (Dodoma and Singida) are expected to feature partly cloudy conditions with passage of light showers and sunny periods. The remaining parts of the country will feature partly cloudy conditions and sunny periods.

Prepared by

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