# TANZANIA METEOROLOGICAL AGENCY

# DEKADAL WEATHER REVIEW

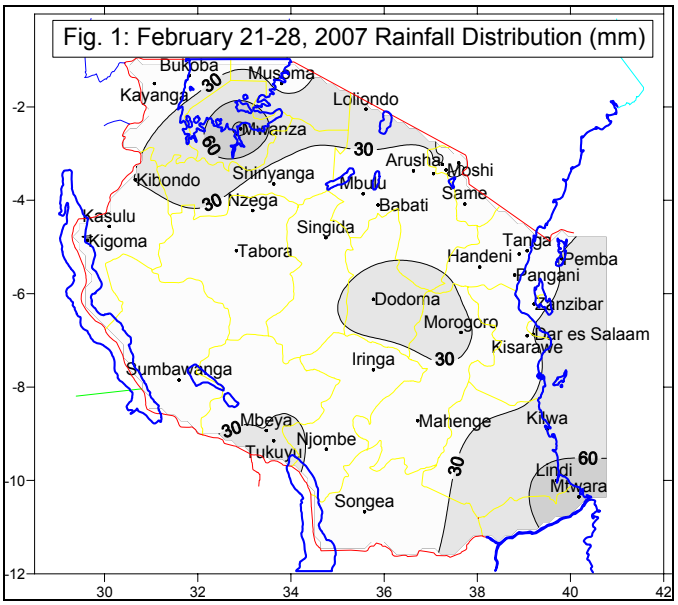
No. 18 2006/07 Cropping Season — February 21-28, 2007

## SYNOPTIC SITUATION

During the period 21st to 28th February, the northern hemisphere systems, the Azores and Arabian anticyclones remained strong and maintained the position of the Inter-Tropical Convergence Zone (ITCZ). The southern hemisphere systems, the St. Helena and Mascarene anticyclones, and the East African ridge were relaxed, thus allowed the position of the Zonal Arm of ITCZ to be located between latitude $10^0$ and $15^0$ south. The northeasterly flow dominated over northern coast, and backing to northwesterly over northeastern highlands. The northerly and northwesterly flows dominated over southern areas. Diffluent pattern was observed over western areas backing to southeasterly to converge over Lake Victoria basin. The development of tropical storm *Gamede* over the central Indian Ocean, towards the end of the dekad generated feeder bands which influenced rainfall over northeastern highlands and northern coast. The anti-cyclonic flow seated over the northwestern Indian Ocean influenced northeasterly winds to penetrate up to northeastern highlands to converge with northwesterly winds, hence resulted to rainfall activities over those areas.

## RAINFALL SUMMARY

During the period, a marked decrease in rainfall activities continued over much of the country. However, a few pockets over Lake Victoria basin (Mwanza) and southern sector (Lindi and Mtwara) reported rainfall amounts greater than 60 mm as shown in Figure 1. Mwanza in the Lake Victoria basin received 100.8 mm as the highest recorded for the dekad, followed by Lindi (74.6 mm) and Mtwara (65.3 mm) both in the southern coast. Except for a few pockets over southwestern, central and northeastern highlands where rainfall reported during the 10 - day period was above 30 mm, while the larger part of the country reported little rainfall (amounts ≤ 30 mm). A drop in rainfall is quite normal for this time of year indicating transition period before the start of long rains '*Masika*'.




## IMPACT ASSESSMENT

### Agrometeorological

Most parts of the country have continued observing a steady falling trend of soil moisture levels during the dekad. The decrease in soil moisture levels favored land preparations for long-rain season "*Masika*" crop over areas with a bimodal rainfall pattern, while over unimodal rainfall areas occasional replenishment of soil moisture has reduced the extent of low soil moisture impact to crops. Maize crop was between advanced vegetative and earing growth stages, except over some few areas, Urambo and Nzega (Tabora region), Kasulu (Kigoma region), and Bahi (Dodoma

region) where the crop was at blister stage. Bean crop was at ripeness stage. Both maize and beans were in moderate state. Paddy and cassava at various growth stages were progressing well.

Pasture conditions and water availability for livestock were very good across the country.

### Hydrometeorological

Rains have boosted water levels in rivers, lakes and dams over the south of the country and eased off the acute load shedding experienced in the country during the second half of 2006.

### Environmental

Coastal areas were hot and humid. The rest of the country experienced warm temperatures and comfortable conditions with less windy conditions over some areas.

## EXPECTED SYNOPTIC SYSTEMS DURING MARCH 01 – 10, 2007

During this dekad the series of tropical storms may develop, which will influence rainfall activities over some part of the country. The anti-cyclonic flow over the northwestern Indian Ocean will start to weaken hence allowing zonal arm of the ITCZ to retreat slightly northwards.

The northerly and southeasterly component wind flows will dominate over southern area, southern coast, and southwestern highlands, resulting into rainfall increase over those areas. The Arabian ridge and Azores anticyclone over the northern hemisphere will start to weaken allowing the position of zonal arms of the I T C Z to shift northwards. The St. Helena and Mascarene anticyclones and the East African ridge over the southern hemisphere will start to intensify.

## EXPECTED WEATHER DURING MARCH 01 – 10, 2007

Areas with the unimodal rainfall pattern are expected to experience rainfall increase. The southern, southern coastal belt, southwestern highlands, western areas, and central areas, Lake Victoria basin will experience cloudy conditions with thundershowers over some areas and sunny intervals. Northeastern highlands and northern coast will experience partly cloudy conditions with thundershowers over few areas with sunny periods. The rest of the country is expected to partly cloud conditions with sunny periods.

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