TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

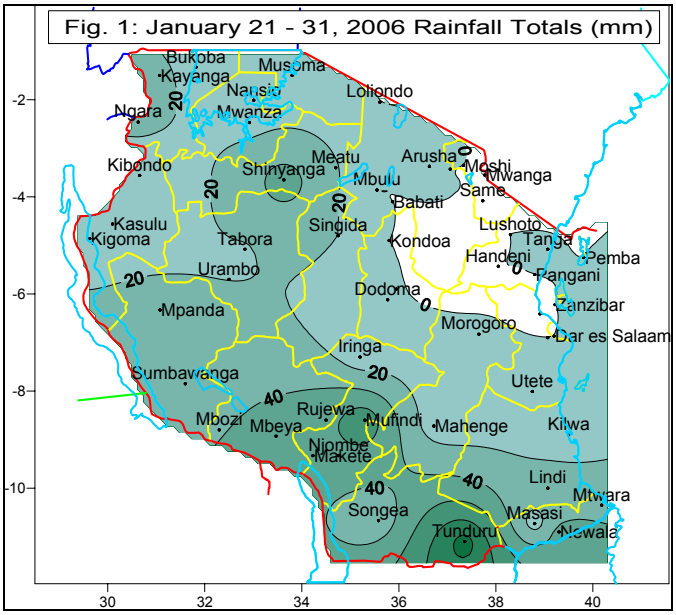
No. 15 2005/06 Cropping Season January 21 - 31, 2006

SYNOPTIC SITUATION

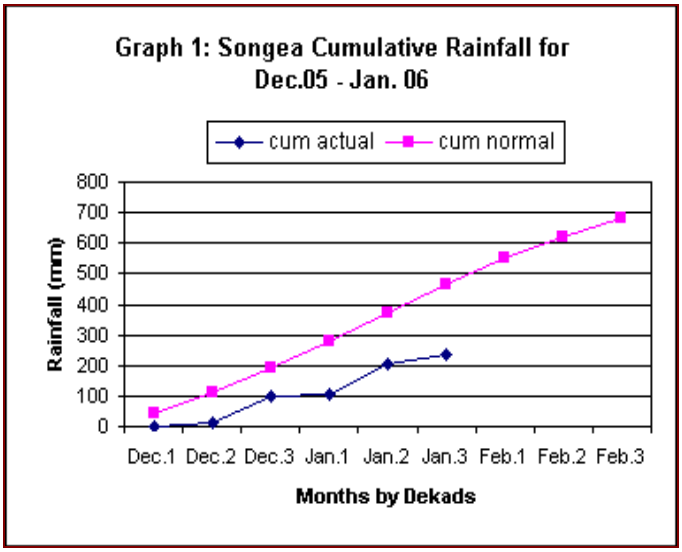
During the period 21–31st January, the Azores and Siberian anticyclones remained intense with an extended ridge axis toward the north eastern highlands areas. The zonal component of the Inter-Tropical Convergence Zone (ITCZ) was active over the southern parts of the country. The meridional component of the ITCZ to the west remained active with associated rainfall activities over the western part, southern western highlands and southern regions. On the other hand, St. Helena and Mascarene anticyclones were relatively weak and the passage of the fronts systems over the southern tip of Africa contributed more to their weakening. The northeasterly wind flow becoming northerly on reaching the southern coast became evident during the dekad. Over western and southern parts of Tanzania, the convergence of northwesterly wind flow from the Congo basins and northeasterlies from western Indian Ocean led to rainfall activities over those areas.

RAINFALL SUMMARY

During the period, a marked decrease in rainfall activity was observed across the country as compared to the previous dekad. Figure 1, shows the spatial rainfall distribution as observed during the third dekad of the month. Most areas received total rainfall less than 20 mm with some areas of the northern coast, northeastern highlands and central regions received no rainfall at all. The highest total rainfall recorded for the dekad was 109.7 mm over Tunduru station in the southern region. Rainfall performance over areas with a unimodal rainfall pattern (western, southwestern highlands, central and southern coast), indicates that seasonal rains have been below normal since November 2005.



Graph 1 compares the current cumulative rainfall to the long-term mean for the period from December 1st dekad to-date at Songea Airport.



Rainfall over this area indicates a shortfall of about 64 mm during the past 10-days and about 229 mm since the beginning of the season (December 2005).

IMPACT ASSESSMENT

Agrometeorological

The dekad experienced soil moisture deficits due to observed decrease in rainfall activity. This condition threatened cropping activities including planting and weeding, and subsequent crop growth and development over unimodal sector of the country. Areas over the western sector (Kigoma, Rukwa and western Tabora regions), maize crop was at tasseling stage with moderate state. Over the southern sector (districts of Makete, Mufindi and Ludewa in Iringa region and Namtumbo in Ruvuma region), maize crop was in moderate state at various growth stages ranging from emergence to early vegetative stage.
Wilting of crops was observed over lowlands in all districts of Morogoro region, except for a few highland locations of Mahenge and generally swampy areas of Kilombero district where the crop was fairing well. Most fields though ploughed, have not been planted with any crop due to the widespread soil moisture stress gripping most of central and southern coast as such the growing season has been shortened.

For bimodal areas mainly over few areas in the Lake Victoria Basin, besides poor crop yields expected, harvesting of *Vuli* crop was coming to an end, while land preparations for long rains (*Masika)* season started although at low pace.

Hydrometeorological

Water levels in rivers, lakes and dams remained low during the period. Water for domestic and industrial purposes should be used sparingly.

Environmental

Warm/hot conditions and high evaporation rates were experienced in many parts of the country.

EXPECTED SYNOPTIC SYSTEMS DURING FEBRUARY 01 – 10, 2006

The position of the ITCZ is expected to remain south over southern Tanzania. The southern hemisphere systems, the Mascarene and St. Helena anticyclones are expected to remain weak. The Siberian and Azores anticyclones over the northern hemisphere are expected to remain strong and continue to maintain the position of ITCZ further south. Westerly to northwesterly wind flow from the Congo basin and northeasterlies from the western Indian Ocean will continue to dominate, leading to low level moisture convergence and significant rainfall over southern Tanzania.

EXPECTED WEATHER DURING FEBRUARY 01 – 10, 2006

Western parts of the country are expected to experience partly cloudy conditions with showers and thunderstorms over few areas and sunny periods. Southwestern highlands and southern region will feature cloudy conditions with showers and thunderstorms over few areas becoming heavy at times and sunny periods. The coastal regions will feature partly cloudy conditions with occasional light rains over few areas and sunny periods. The Lake Victoria Basin (mainly over Kagera region) is expected to feature partly cloudy conditions with showers and thunderstorms over few areas and sunny periods. Northeastern highlands and central regions are expected to feature partly cloudy conditions and sunny periods.

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