



TANZANIA METEOROLOGICAL AGENCY



DEKADAL WEATHER REVIEW

No. 20

2005/06 Cropping Season

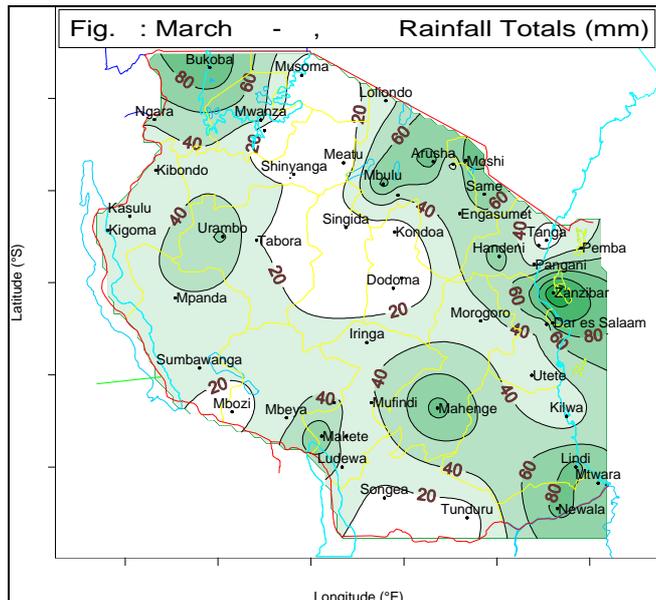
March 11 - 20, 2006

SYNOPTIC SITUATION

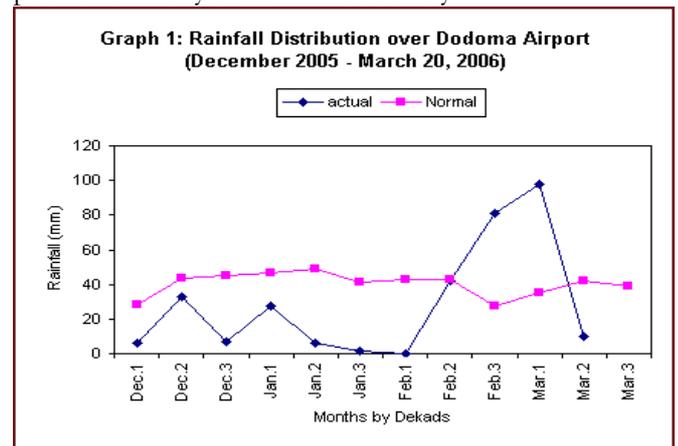
During the period 11–20th March, the Mascarene and St. Helena anticyclones continued to intensify at the beginning of the dekad then relaxed towards the end of the period. This relaxation had maintained the position of the Inter-Tropical Convergence Zone (ITCZ) around the Equator. The Azores and Siberian anticyclones continued to relax, although there were a few occasions when slight intensifications were noticed. The meridional component of the ITCZ had relaxed thus weak winds from the Congo forest were observed. The dekad was dominated by the southeasterly winds thus advection of moist air from the Ocean coupled with convective activities over northern coast areas, central and northeastern highlands.

RAINFALL SUMMARY

During the period, a slight increase in rainfall activities was observed over bimodal rainfall areas of



the western Lake Victoria basin, northern coast and Islands of Zanzibar and Pemba. The activities decreased markedly over the eastern Lake Victoria basin and in most of unimodal rainfall pattern areas, where the southern and central regions reported dekadal rainfall totals below 20 mm. The highest amount reported for the dekad was 147 mm over Zanzibar Island. Rainfall distribution was generally poor over many areas in the country.



Graph 1, compares dekadal rainfall for the current season to the long-term mean (normal) for the period from first dekad of December 2005 to-date at Dodoma Airport, which has observed below normal rainfall for most of the dekads.

IMPACT ASSESSMENT

Agrometeorological

The dekad experienced a slight soil moisture decrease over most areas that experience a unimodal rainfall pattern and eastern parts of the Lake Victoria basin due to observed decrease in rainfall activity. The condition led to partial wilting of crops mainly over the districts of Mbarali and Mbozi in Mbeya region and Meatu in Shinyanga region. Over the western part (Kigoma, Rukwa and western Tabora regions)

maize crop was at wax ripeness and ripeness stages in good state.

Areas over the southwestern highlands and southern sector, maize in good state was at late vegetative and wax ripeness stages. Over the southern coast (Newala district) in Mtwara and Lindi regions maize crop was at late vegetative and tasseling stages in good state.

Over the areas of bimodal rainfall regime (Lake Victoria basin, northern coast and northeastern highlands) sampled reports indicated that maize crop was in good state at emergency and vegetative stages.

Pastures and water for livestock/wildlife indicated some improvement during the dekad.

Hydrometeorological

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

Environmental

Temperatures are cooling down while evaporation rates are also coming down in many parts of the country.

EXPECTED SYNOPTIC SYSTEMS DURING MARCH - ,

The southern hemisphere systems, the Mascarene and St. Helena anticyclones are expected to continue intensifying with a fluctuation of north to south thus maintaining the position of the zonal and meridional components of the ITCZ to be around the Equator.

The position of the ITCZ is expected to remain along the Equator during the period as sea surface temperatures over the Indian Ocean warm slightly. The Arabian and Azores anticyclones over the northern hemisphere will continue to relax and hence allow the movement of the ITCZ from south to north although by a very little displacement. The southeasterly to easterly wind flow over northern coastal areas and northeastern highlands will persist favouring increased rainfall activities.

EXPECTED WEATHER DURING MARCH - ,

The Lake Victoria basin, (Mwanza, Mara and Kagera regions) will experience partly to cloudy conditions with showers and thunderstorms over few areas. Southwestern highlands (Mbeya, Rukwa and parts of southern Iringa and Ruvuma regions) will feature partly cloudy conditions with showers and thunderstorms over few areas. Northern coast (Dar es Salaam, Coast and Tanga regions), Southern coast (Mtwara and Lindi regions) and the Islands of Zanzibar and Pemba will feature partly cloudy to cloudy conditions with showers and thunderstorms at times. Northeastern highlands areas (Arusha, Manyara and Kilimanjaro regions) will experience cloudy conditions at times with showers and thunderstorms especially towards the end of the dekad. Western areas (Kigoma and Tabora regions) and central areas (Dodoma and Singida regions) are expected to feature partly cloudy conditions with showers and thunderstorms over few areas.