TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

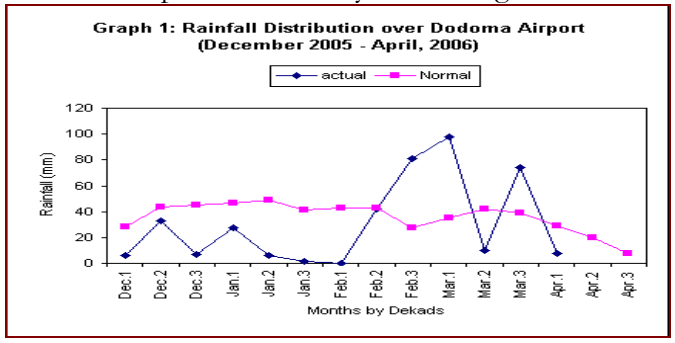
No. 22 2005/06 Cropping Season April 01 - 10, 2006

SYNOPTIC SITUATION

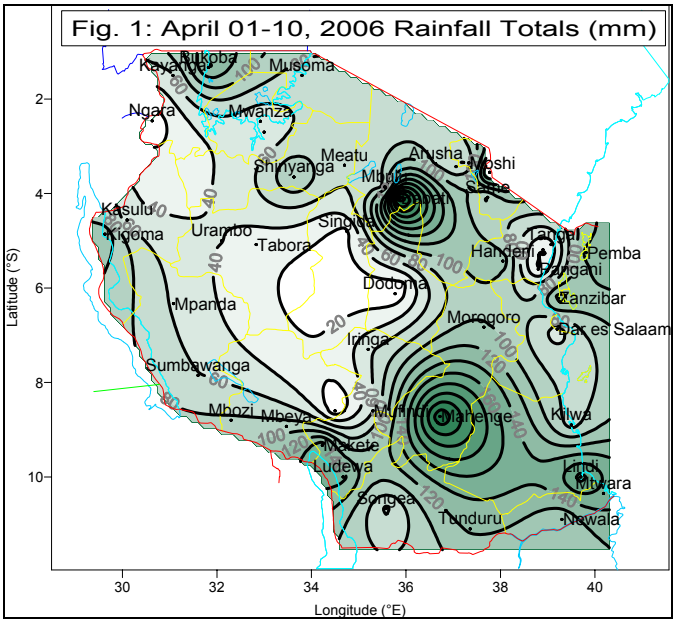
During the period 01st –10th April, the near equatorial trough and the southeasterly to easterly wind patterns over the east African coast dominated especially towards the end of the dekad and it was supported by convective processes thus giving room to rainfall activities over the northern coast, northeastern highlands and parts of Lake Victoria basin. The Mascarene and St. Helena anticyclones weakened thus weakening the East African ridge over southern region and parts of central areas. The Inter-Tropical Convergence Zone (ITCZ) had been maintained within the country mainly over the southern coast, southern region and parts of northern coastal areas. During the period, the Azores and Siberian anticyclones intensified at the beginning of the dekad and relaxed towards the end, which led to an active meridional component of the ITCZ especially over the western parts of the country.

RAINFALL SUMMARY

During the period, rainfall activities decreased over most of central areas (Singida and Dodoma regions) and neighbouring areas, and parts of western and northern coast, where rainfall total was about 40 mm as depicted by Figure 1.



The highest rainfall amount of about 280 mm was reported over Babati district in Manyara region, while Mahenge in Ulanga district continued reporting substantial amounts of rainfall.



Graph 1, depicts rainfall performance over the central region where the dekadal rainfall for the current season was compared with 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 season as the end of rainfall season sets in.

IMPACT ASSESSMENT

Agrometeorological

Over areas that experience one rainfall season (unimodal); southwestern highlands, western, southern and southern coast, there were slight increases in soil moisture availability. The crops particularly maize, was in moderate state between tasseling and ripeness stages. Beans, the second phase crop was at various growth stages ranging from emergence over Ludewa district in Iringa region to flowering stage over Mbeya and Kagera regions. However, harvesting of the first phase crop (beans)

over Mpanda and highlands of Mahenge was hindered by wet conditions that prevailed during the period. Paddy in moderate state over areas of Mbeya region was between vegetative and flowering stages. Over the central regions (Singida and Dodoma), the maize crop was at tasseling stage in moderate state, although the soil moisture is expected to continue decreasing towards the end of April, a condition that will negatively affect immature crops.

Over areas that experience two rainfall seasons (bimodal); Lake Victoria basin, northern coast and northeastern highlands, maize crop was at early vegetative stage and in good state. However, over a few pocket areas that experienced flash soil moisture supply during January and February maize crop was reported to be at tasseling stage and in moderate state while at Mto wa Mbu in Arusha region the crop was at earing stage.

Paddy in moderate state was at transplanting stage in Shinyanga region and early vegetative stages in the Coastal region. As for cassava crop, it was at various growth stages and the crop state was good.

Pasture and water supply to livestock/wildlife generally improved to a satisfactory level over bimodal areas.

The expected rainfall and cloudy conditions over some areas during the second dekad of April will further improve crop conditions mainly over bimodal areas.

Hydrometeorological

Water levels in rivers, lakes and dams have improved significantly during the period. However, water for domestic and industrial purposes should be used sparingly.

Environmental

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

EXPECTED SYNOPTIC SYSTEMS DURING APRIL 11 – 20, 2006

The near equatorial trough and southeasterly to easterly wind flow patterns will persist during the period, thus giving way to advection of moist air from the Indian Ocean towards the coastal belt. The Mascarene and St. Helena anticyclones are expected to continue intensifying thus leading to the East African ridge over southern part of our country towards central areas. The zonal and meridional components of the ITCZ will maintain its position within Equator to 5 °N. The Arabian and Azores anticyclones over the northern hemisphere will continue to relax slowly and hence give way to a northward shift of the ITCZ belt.

EXPECTED WEATHER DURING APRIL 11 – 20, 2006

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

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