TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

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

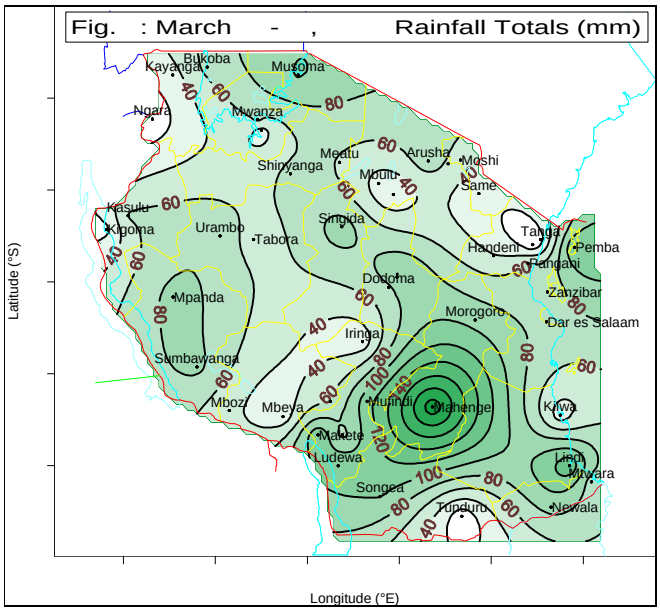
SYNOPTIC SITUATION

During the period 21–31st March, the Mascarene and St. Helena anticyclones intensified and thus led to extension of the East African ridge over southern areas and parts of central Tanzania, which caused a diffluent flow over the areas. Azores and Siberian anticyclones indicated some fluctuations as they were weakened and intensified at different times of the dekad. The meridional arm of the Inter-Tropical Convergence Zone (ITCZ) relaxed thus weakened winds from the Congo forest and hence limited the convergence to Congo areas. The zonal arm of the ITCZ was maintained over the country thus favouring insolation in the morning followed by isolated showers over most areas in the afternoon. The southeasterly wind patterns over the East African coast continued to dominate thus giving room for rainfall activities over northern coast, northeastern highlands and parts of central and southern coastal areas.

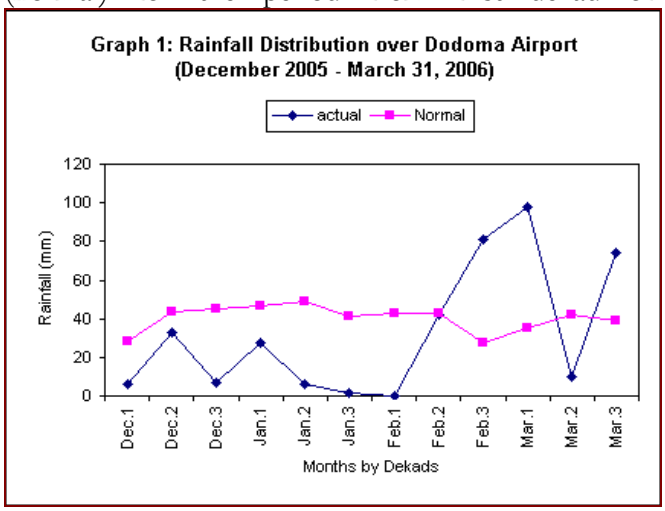
RAINFALL SUMMARY

During the period, rainfall activities increased over most areas of the country, although a few pockets of little rainfall (less than 40 mm) were observed during the dekad over western Lake Victoria basin, southern, and southwestern and northeastern highlands areas (Figure 1). Significant increases in rainfall amounts continued over south of Morogoro region, including Mahenge in Ulanga district where the highest rainfall amounting to 214 mm was reported.

Notable improvement in rainfall conditions was observed over central and eastern Lake Victoria basin, where there had been reduced activities during the previous dekad.



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 dekads.

IMPACT ASSESSMENT

Agrometeorological

The dekad experienced a substantial soil moisture increase that enhanced crop growth and development over most areas in both bimodal and unimodal rainfall patterns. Crop stages particularly maize ranged between tasseling and ripeness over unimodal (southwestern highlands, central, western, southern and southern coast) areas, while over bimodal (Lake Victoria basin, northern coast and northeastern highlands) areas, the crop stages ranged between vegetative and tasseling, with a few pockets of late planting as reported from Pangani district in Tanga region. Cassava crop mostly at early stages was observed across the country and paddy at between emergency and flowering stages as observed over the cultivated areas of Mbeya, Tabora, Shinyanga, Lindi and Coast regions were at moderate state. The water stressed crops reported in the previous dekad from the districts of Mbarali and Mbozi in Mbeya region and Meatu in Shinyanga region, slightly regained due to soil moisture replenishment. This situation slightly favored pasture and water availability to livestock/wildlife, which had been of great concern.

The expected rainfall and cloudy conditions over some areas during the first dekad of April will further improve crop conditions although in other areas it will impede drying of matured crops and harvesting activities.

Hydrometeorological

Water levels in rivers, lakes and dams have shown some recovery 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 APRIL – ,

The southern hemisphere systems, Arabian and Azores anticyclones over the northern hemisphere will relax and hence allow the shifting of the ITCZ from south to north although by very little displacement. The southeasterly to easterly wind flow (easterly wave) over the northern coastal areas and northeastern highlands will persist favouring those areas with possibility of increased rainfall activities. The Mascarene and St. Helena anticyclones are expected to continue intensifying thus creating the East African ridge over southern towards central parts of our country. The zonal and meridional arms of the ITCZ will shift to north of the Equator.

EXPECTED WEATHER DURING APRIL – ,

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 and sunny intervals over few areas. Northeastern highlands (Arusha, Kilimanjaro and Manyara regions) areas will experience cloudy conditions at times with showers and thunderstorms over few areas. 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 and sunny periods. Lake Victoria basin, (Mwanza, Mara and Kagera regions) will experience partly cloudy to cloudy conditions with showers and thunderstorms over few areas. Southwestern highlands (Mbeya, Rukwa and parts of southern Iringa regions) and Ruvuma region will be partly cloudy with showers and thunderstorms at times over few areas although most of the areas will be dominated by sunny periods.

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