TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No. 23 2005/06 Cropping Season April 11 - 20, 2006

SYNOPTIC SITUATION

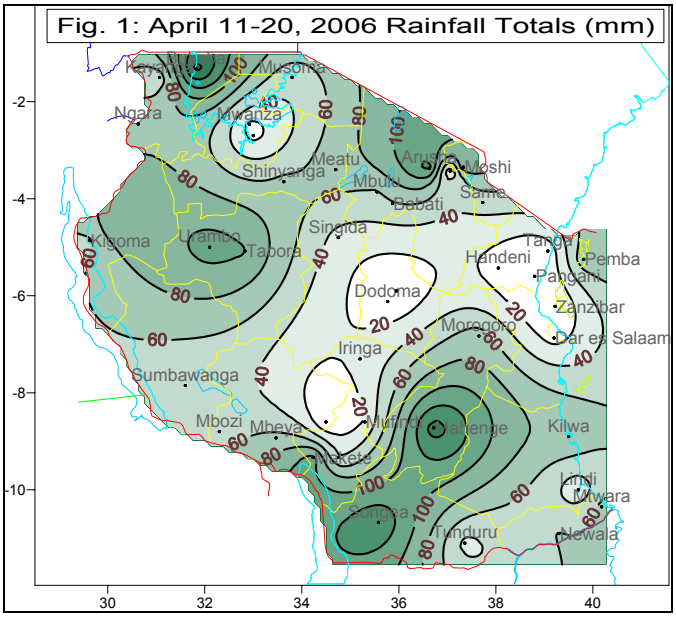
During the period 11 – 20th April, the Mascarene and St. Helena anticyclones intensified at the beginning of the dekad and relaxed towards the end of the dekad. The axis of the East African ridge was observed in the southern part of our country. The Inter Tropical Convergence Zone (ITCZ) shifted to the northern part of the country and the wind flow was more of southerly component rather than southeasterly. The Azores and Siberian anticyclones relaxed at the beginning of the dekad and intensified towards the end, which led to relaxation and intensification of the ITCZ. In association the meridional and zonal components of the ITCZ were active especially over the western and northern sectors of the country.

The near equatorial trough together with the southeasterly to easterly wind patterns over the East African coast was weak and thus gave room to southerly component especially at the beginning of the dekad and towards the end.

RAINFALL SUMMARY

During the period, rainfall decreased over most parts of the country, except for few areas that received rainfall of about 100 mm.

A marked decrease in rainfall amounts that is depicted by a 40 mm isohyet are observed over most areas of the central and northern coast, and parts of southwestern highlands and southern part of Lake Victoria basin (LVB) (Figure 1). The highest rainfall amount of about 170 mm was reported at Bukoba over western LVB. Mahenge in Ulanga district which is under a unimodal rainfall pattern continued reporting substantial amounts of rainfall.



IMPACT ASSESSMENT

Agrometeorological

Soil moisture decreases were observed over most parts of the country following decrease in rainfall activities during the period. Over most parts of the unimodal rainfall regime (southwestern highlands, southern, central\ and western), soil moisture has started declining which is a normal trend as the end of the season draws near in those areas.

Over southwestern highlands and southern region, districts of Makete, Mufindi and Njombe in Iringa region, Newala in Mtwara region, Tunduru in Ruvuma region and Lindi region maize crop was in good state at between tasseling to ripeness stages. Over western part of the country, maize crop was in good state at ripeness stage with few areas that started harvesting although at low pace due to ongoing rainfall activities. Over central areas

(Dodoma and Singida regions) the crop was in moderate state at tasseling stage.

Generally, the second phase beans crop was at various growth stages ranging from emergence to flowering over most areas, except over Kasulu in Kigoma region where the crop was at pod filling and in good state.

Over bimodal rainfall regime (LVB, northern coast and northeastern highlands) despite soil moisture decreases, the state of crops (maize and beans) was generally good. Maize crop was between tasseling and earing stages in the districts of Babati and Mbulu in Manyara region, and Mwanga in Kilimanjaro region. Over Pangani district in Tanga region, maize crop in moderate state was at early vegetative stage.
Bean crop was reported to be in good state at between flowering and pod filling stages in Kagera region (districts of Ngara and Karagwe) and Mbulu in Manyara region. In other areas the crop was generally in moderate state at vegetative growth stage.

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

The expected rainfall and cloudy conditions over some areas during the third 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 21 – 30, 2006

The Arabian and Azores anticyclones over the northern hemisphere will continue to relax and hence giving way to northward shift of the ITCZ belt. During this dekad the near equatorial trough together with the southeasterly to easterly wind flow patterns will persist thus giving way to advection of moist air from the Indian Ocean towards the coastal belt. The southern hemisphere systems, the Mascarene and St. Helena anticyclones are expected to continue intensifying thus creating the East African ridge over southern part of our country towards central areas and this will enhance the southerly wind flow over northern coast areas and the northeastern highlands.

EXPECTED WEATHER DURING APRIL 21 – 30, 2006

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

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