TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

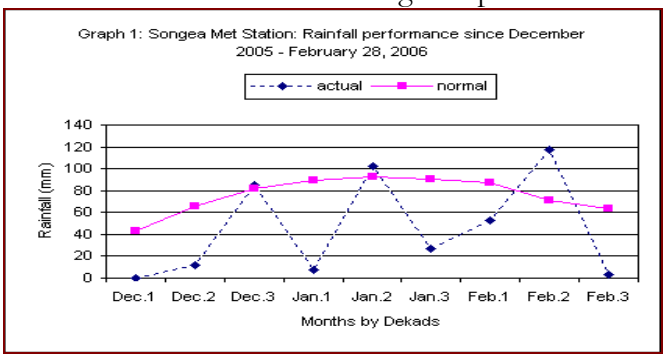
No. 18 2005/06 Cropping Season February 21 - 28, 2006

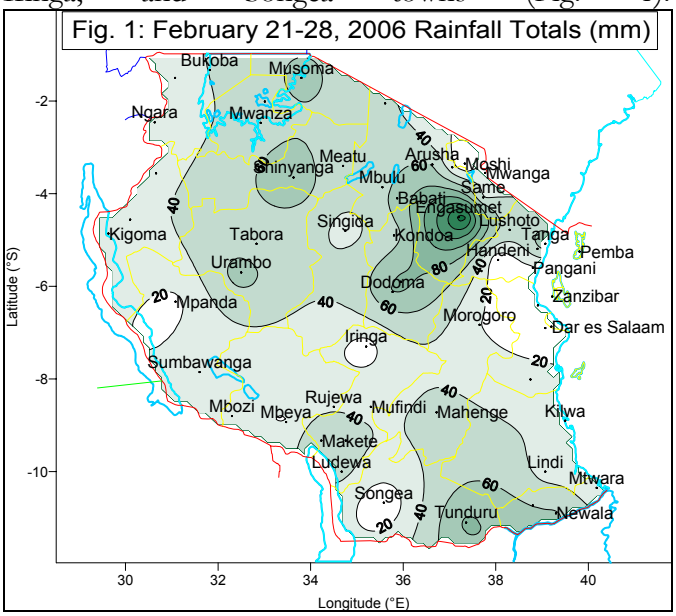
SYNOPTIC SITUATION

During the period 21–28th February, the Azores and Siberian anticyclones were intense giving way to the Arabian ridge to extend to northeastern highlands in the early days of the dekad and slightly weakened towards the end of the dekad. The southern hemisphere anticyclones (St. Helena and Mascarene) were generally weak due to the regular passage of the frontal systems over the southern tip of Africa. The third tropical cyclone in southwestern Indian ocean, this tropical cyclone season, '*Carina*', was observed on 25th February 2006 at 13°S and 79°E deepened further towards the end of the dekad, hence pulling the moist Congo air mass from the west to coastal areas coupled with the low level moisture convergence to the east thus causing thunder showers over some areas of northern coast and northeastern highlands. The zonal component of the Inter-Tropical Convergence Zone (ITCZ) was active over the southern sector of the country while its meridional arm was prominent and active to the west with an extended trough from the Congo basin towards the western parts of the country.

RAINFALL SUMMARY

During the period, most stations reported some rainfall activities with a slight spatial increase compared to the previous dekad. Drier conditions with rainfall as little as 20 mm or less were reported over stations in the northern coast (Morogoro north, Coast and Dar es Salaam regions), northeastern highlands (Kilimanjaro region), and Singida, Mpanda, Iringa, and Songea towns (Fig. 1).





The highest total rainfall reported for the period was 174.0 mm over Engasumet station in Simanjiro district (Manyara region).

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

IMPACT ASSESSMENT

Agrometeorological

During the dekad, the observed soil moisture replenishment brought relief to field crops. Persistent dry spell conditions that impeded most of agricultural activities and caused wilting of early planted crops over several areas particularly central and southern

coast in the unimodal rainfall areas, and most of bimodal rainfall regime eased out. Over the western part of the country (Kigoma, Rukwa and Tabora west) regions maize crop was in good state between earing and wax ripeness stages. Likewise over several parts of the southwestern highlands maize crop ranged from late vegetative stage to earing and in moderate state.

The crop was also reported to be in moderate state over few areas of Mtwara (Newala district) and Lindi regions in the southern coast.

Over the bimodal rainfall areas, farmers continued with land preparations for the long rains *(Masika)* season, although reports from sampled stations indicate that planting crops mainly beans and maize has started over a few areas in Ngara and Karagwe districts in Kagera region, Rombo in Kilimanjaro region and Pangani in Tanga region.

Pastures and water supply for livestock has generally remained low over most of the central and northeastern highlands areas.

Hydrometeorological

Water levels in rivers, lakes and dams remain generally 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 MARCH 01 – 10, 2006

The ITCZ is expected to remain over southern Tanzania. The southern hemisphere systems, the Mascarene and St. Helena anticyclones are expected to intensify gradually supporting the shifting northwards of the zonal and meridional components of the ITCZ.

The occurrence of the tropical cyclones over the eastern coast of Madagascar will continue from time to time, enhancing the pull of moist air from Congo forest. Westerly to northwesterly wind flow from the Congo basin and the northerly to northeasterly wind flow from the western Indian Ocean will continue to dominate the low level moisture convergence over southwestern, central and southern Tanzania and hence leading to rainfall activities over most areas. The Arabian and Azores anticyclones over the northern hemisphere are expected to relax due to northward movement of the ITCZ.

EXPECTED WEATHER DURING MARCH 01 – 10, 2006

Western areas (Kigoma and Tabora regions) and central (Dodoma and Singida regions) are expected to feature partly cloudy to cloudy conditions with showers and thunderstorms from mid towards the end of the dekad. The Lake Victoria basin (Mwanza Mara and Kagera region) will experience cloudy conditions with showers and thunderstorms over most areas especially at the beginning of the dekad breaking to partly cloudy conditions with showers and thunderstorms over few areas at the end of the dekad. Southernwestern highlands (Mbeya, Rukwa and parts of southern Iringa and Ruvuma regions) will feature partly cloudy to cloudy conditions at times with showers and thunderstorms over most areas. Northern coast (Dar es Salaam, Coast, Tanga), 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.

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