TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No. 12 2006/07 Cropping Season December 21-31, 2006

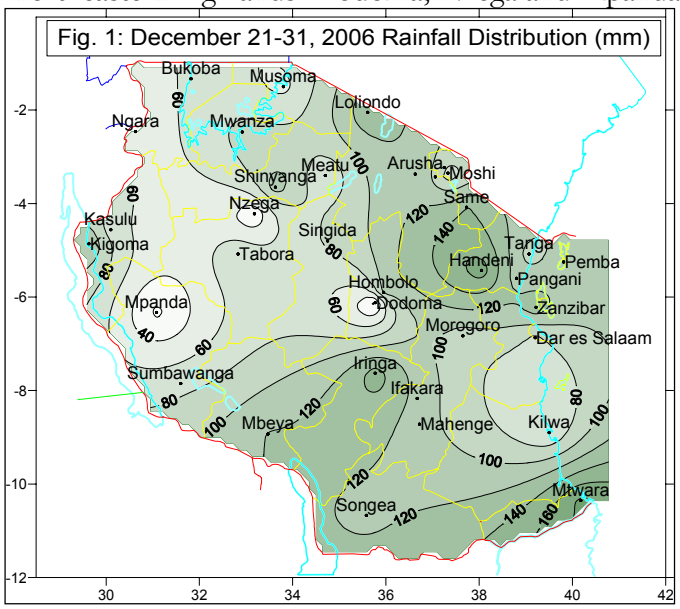
SYNOPTIC SITUATION

The tropical cyclone *Bondo* which started as tropical disturbance on the last dates of the second dekad of December continued to give effects on weather as it was drugging the moisture from the Congo forest by northwesterly strong winds which continued to converge around western areas, Lake Victoria basin, central and parts of northeastern highlands. Towards the end of the dekad, there was another tropical disturbance which deepened to a severe tropical storm *Clovis*.

The northwesterly monsoon flow continued to dominate over the western areas, southern coast, central and southern region. Northern coast were dominated by the northeasterly flow that caused some tendencies of weather reduction over northern coast and northeastern highlands. The St. Helena and Mascarene anticyclones and the East African overland ridge over the southern hemisphere continued to relax. The Siberian and Azores anticyclones and Arabian ridge pushed southwards the zonal component of the Inter-Tropical Convergence Zone (I T C Z).

RAINFALL SUMMARY

During the period, many parts of the country received heavy rainfall. The 10-day total rainfall amounts that exceeded 100 mm were recorded over areas in the eastern Lake Victoria basin, northeastern highlands, northern coast, central, and parts of the western sector of the country (Fig. 1). A few stations recorded rainfall totals that exceeded 120 mm, with the highest amount being reported at Mtwara (184.7 mm), followed by Handeni (170.7 mm), Iringa (149.8 mm), Same (141.0 mm), Loliondo (135.7 mm), Zanzibar (132.1 mm), Mbeya (120.7 mm), and Kigoma (120.5 mm). The high intensity rainfall recorded during the period caused flooding over some areas (e.g. Igunga in Tabora region and Magu in Mwanza region) and resulted into significant infrastructure and crop destruction. A few rainfall activities were observed over parts of Lake Victoria basin (Kagera, Mwanza and Shinyanga), western (northern Tabora, Kigoma and Rukwa regions), and northeastern highlands. Dodoma, Nzega and Mpanda reported rainfall amounts less than 40 mm. The observed rainfall activities during the third dekad of December depicted some decrease when compared with that of the second dekad.



IMPACT ASSESSMENT

Agrometeorological

Adequate soil moisture status prevailed during the dekad over much of the country and benefited crops in the fields. In several areas with bimodal rainfall regime, most crops particularly maize and beans were ranging between vegetative and blister stage (maize) while beans crop was between vegetative and pod

filling. Paddy crop was at transplanting stage while cassava was at various growth stages and in good state. Over unimodal areas, crops and other field activities such as land preparation and planting benefited from improved soil moisture status in the region. A few areas however, were hit by excessive soil moisture that was dangerous to the growing field crops mainly beans and maize as reported from Kasulu, Sumbawanga and Karagwe in Kigoma, Rukwa and Kagera regions respectively. Also the excess soil moisture resulted to floods that hit Igunga districts in Tabora region, Magu district in Mwanza region and Meatu districts in Shinyanga region.

Pasture conditions and water availability for livestock across the country are very good.

Hydrometeorological

Rains have boosted water levels in rivers, lakes and dams over most areas in the country and eased off the acute load shedding experienced in the country in second half of 2006.

Environmental

Coastal areas were hot and humid. The rest of the country, temperatures were warm and comfortable, with less windy conditions over some areas.

EXPECTED SYNOPTIC SYSTEMS DURING JANUARY 01 – 10, 2007

During the period, Tropical cyclones over the south Indian Ocean may be observed regularly. The north easterly component over extreme northern coast becoming northerly component over southern coast will dominate.

The Siberian and Azores anticyclones and Arabian ridge over the northern hemisphere will continue to intensify hence pushing southwards the meridional and zonal Arms of the I T C Z. The feature will create an anti-cyclonic flow pattern over the extreme northern coast and parts of northeastern highlands. This diffluent pattern will reduce weather activities over those areas. The St. Helena, Mascarene anticyclone and the East African ridges over the southern hemisphere will continue to relax. The northwesterly monsoon flow associated with tropical cyclone occurrences will continue to be observed. The zonal trough from the Ocean will be blocked by the anti-cyclonic system around the coast thus the meridional arm will be more active than the zonal arm.

EXPECTED WEATHER DURING JANUARY 01 – 10, 2007

The western, south western highlands, southern region and parts of southern coast and central areas (Dodoma and Singida regions) are expected to experience cloudy conditions with thundershowers becoming heavy at times over most areas and few sunny intervals. Northern coast (Tanga and Dar es Salaam regions, and the Islands of Zanzibar and Pemba) will feature partly cloudy conditions with occasional light showers over few areas and sunny periods. Lake Victoria basin will experience partly cloudy to cloudy conditions at times with thundershowers over some areas and sunny periods.

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