SYNOPTIC SITUATION

During the period 11th to 20th May, the Azores and Arabian anticyclones in the northern hemisphere were relaxed at the beginning of the dekad while St. Helena and Mascarene anticyclones together with East African ridge in the southern hemisphere were intense. This situation allowed the Inter-Tropical Convergence Zone (ITCZ) to propagate further northwards. Towards the end of the dekad, sub-tropical depressions over the southern tip of Africa eroded the southern hemisphere anticyclones. This coupled with the orientation of the Near Equatorial Trough (NET) enhanced rainfall activities over the northern coast. Central and southern regions were under a low-level diffluent flow pattern caused by the dominant East African ridge leading into dryness. Sea surface temperatures over West Indian Ocean along Tanzanian coast were relatively warm throughout the dekad coupled with significant moisture caused activities over most parts of the northern coast.

RAINFALL SUMMARY

Figure 1 shows that during the second dekad of May 2007 much of the country was generally dry except for a few areas with bimodal rainfall pattern over the northern coast, northeastern highlands and Lake Victoria basin where the reported 10-day rainfall amounts exceeded 40 mm. Much of the rainfall activities were confined over the northern coast and Islands of Pemba and Zanzibar where the reported ten-day rainfall exceeded 200 mm. Pemba reported the highest rainfall amount of 214 mm. Dry conditions persisted over unimodal rainfall regime areas; the central, western, southwestern highlands and southern regions following normal cessation of seasonal rains in those areas as indicated in Fig. 1.

IMPACT ASSESSMENT

Agrometeorological
During the period, declined soil moisture levels continued to be recorded over much of unimodal rainfall areas and some parts of bimodal regime. Soil moisture improved over some parts of the northern coast, northeastern highlands and the Islands of Zanzibar and Pemba. However, the reported soil moisture improvement did not help much the field crops over several parts which had already been severely affected by water stress caused by false start of long rains (Masika) coupled with poor distribution. This situation was critically felt over some localized areas of Same, Simanjiro, Loliondo, Monduli districts and lowlands of Rombo district.
Maize crop over bimodal areas generally ranged from tasselling to ripeness stage and in poor to moderate growth state. Over unimodal areas maize crop was at
No 26  2006/07 Cropping Season  May 11-20, 2007

harvesting maturity with some farmers reported to have started harvesting.

Paddy crop was generally performing moderately across the country while cassava crop was reported at various growth stages in good state.

Pasture conditions and water availability for livestock and wildlife continued to be adequate across the country.

Hydrometeorological
Water levels in rivers, lakes and dams are good over much of the country.

Environmental
The country experienced generally warm temperatures and comfortable conditions.

However, at various intervals these anticyclones are expected to weaken due to erosion of extra tropical depressions enhancing the fall of pressure within the country. Relatively warm sea surface temperatures are expected to persist along the West Indian Ocean adjacent to Tanzania coast. The persistence of a weak Lake trough in harmony with advection of moisture due to southeasterly to easterly flow is also expected to trigger activities over the lake zone. Due to topographical effects, southwestern highlands are expected to have isolated activities mostly over high ground. The position of zonal arm of ITCZ is expected to continue to be located north of the country, while the meridional component of the ITCZ is expected to be positioned further west of the country.

**EXPECTED SYNOPTIC SYSTEMS DURING MAY 21 – 31, 2007**

During this dekad, anticyclones in the southern hemisphere are expected to continue intensifying and their orientations suggest dominant southeasterly
Near Equatorial Trough is expected to be more organized and shift further south so as to allow southeasterly flow backing to southwesterly over the northern coast to easterly flow from the Indian Ocean over the coastal areas becoming southeasterly as they enter the mainland.

Lake Victoria basin (Kagera, Mwanza, Mara and Shinyanga regions) is expected to feature thundershowers over few areas and sunny periods. Northern coast (Dar es Salaam, Morogoro, and Tanga regions, and Islands of Zanzibar and Pemba) and northeastern highlands (Arusha, Kilimanjaro, and Manyara regions) are expected to feature isolated to widespread showers and sunny periods. Southwestern highlands are expected to feature few cases of isolated showers mainly over high grounds and sunny periods. Further reduction of rainfall activities is expected over southern coast, southern region, central and western areas.