During the first dekad of April 2010, the southern hemisphere high pressure systems (St. Helena and Mascarene) continued to intensify while the Siberian high pressure system in the northern hemisphere relaxed thus causing the rain making mechanism, the Inter-Tropical Convergence Zone (ITCZ) to move further northwards over the northern sector of the country. The zonal component of the ITCZ was relatively active over the northern sector of the country. Dominance of southeasterly wind flow pattern enhanced advection of moist air mass from the Indian Ocean towards the coastal areas and hinterlands and northeastern highlands.

**SYNOPTIC SITUATION**

During the first dekad of April 2010, the southern hemisphere high pressure systems (St. Helena and Mascarene) continued to intensify while the Siberian high pressure system in the northern hemisphere relaxed thus causing the rain making mechanism, the Inter-Tropical Convergence Zone (ITCZ) to move further northwards over the northern sector of the country. The zonal component of the ITCZ was relatively active over the northern sector of the country. Dominance of southeasterly wind flow pattern enhanced advection of moist air mass from the Indian Ocean towards the coastal areas and hinterlands and northeastern highlands.

**RAINFALL SUMMARY**

West of Lake Victoria basin and southern coast of the country experienced enhanced rainfall activities during the dekad with more than 150 mm rainfall as shown in Figure 1. Bukoba station was leading by recording 199.9 mm, followed by Mtwara 159.7 mm, Arusha 149.1 mm, Moshi 144.1 mm, Pemba 130.7 mm and Lyamungo 104.7 mm of rain. Remaining stations recorded rainfall amounts below 100 mm as depicted in the rainfall map in Figure 1.

**IMPACT ASSESSMENT**

**Agrometeorological and Crop Summary**

During the dekad most areas of bimodal rainfall pattern had crops mainly maize, paddy and beans ranging from early emergency (late planting) to advanced vegetative growth stages (for the early planted crops). Crops were generally in good state as observed mainly over lowland areas of northeastern highlands (Hai and Same districts) and northern coast (Tanga and Coast regions) where soil moisture supply from Masika rains was adequate.
Weeding was the major activity that occupied most farmers in bimodal areas. Elsewhere, over unimodal areas most crops particularly maize, beans, paddy, sunflower and sorghum were generally between moderate and good state at vegetative to full ripeness stages. The early planted beans mainly over higher altitude areas have already been harvested and second planting phase was in progress at vegetative stage. Paddy crop in moderate state was from early vegetative to wax ripeness stages, while planting of wheat mainly over parts of Mbeya region was almost over and the crop looks good at emergence stage. A few areas like Ismani in Iringa (north) experienced poor crop performance resulting from inadequate soil moisture supply experienced during consecutive past dekads. Floods reported over parts of Bukombe district in Shinyanga region caused destruction of crops and property. Desert locusts have broken out in Mpanda district, Rukwa region. Market supply for cassava over several areas continued fairly well. Pasture and water availability are good and livestock conditions are normal.

Hydro-meteorological Summary
The ongoing rains over most parts of the country have maintained water levels in lakes, dams and rivers, though a few cases of river floods were observed. Water availability for human, industrial and energy generation purposes has improved.

Environmental Summary
During the dekad temperatures were generally mild with local variations of high temperatures at the beginning of the dekad causing slight discomfort over the coastal belt.

Lake Victoria Basin (Kagera, Shinyanga, Mara and Mwanza regions), and Kibondo district are likely to experience normal rainfall with outbreaks of above normal at times. Northern coast and hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions together with the Islands of Unguja and Pemba) are expected to experience normal to above normal rainfall. Heavy rains are likely to occur at times especially over the coastal belt areas. Southern Coast (Mtwarra and Lindi regions), most areas are expected to experience normal rainfall. Northeastern Highlands (Arusha, Kilimanjaro and Manyara regions) are expected to experience normal rainfall with outbreaks of above normal at times. Southwestern highlands (Rukwa, Mbeya and Iringa regions) are expected to experience mainly normal rainfall. Southern region (Ruvuma region) and parts of Ulanga district are expected to experience mainly normal rainfall. Western areas (Tabora and Kigoma regions) are expected to feature mainly normal rainfall. Central (Dodoma and Singida regions) are expected to feature normal rainfall with a decreasing trend as the ITCZ shifts further north.

For the coming dekad, the southern hemisphere high pressure systems (the St. Helena and the Mascarene) are expected to intensify significantly whereas the Azores and Siberian high pressure systems in the northern hemisphere are likely to relax allowing the zonal component of the ITCZ to continue moving northwards. Warm Sea Surface Temperatures (SSTs) over the southwest Indian Ocean are likely to persist during the coming ten days. This configuration will allow southeasterly to easterly wind flow pattern over the eastern parts of the country. The flow is therefore expected to enhance moisture over the eastern part of the country. As southerly wind flow pattern becomes more dominant over the hinterland less moisture is expected over the central areas.

EXPECTED WEATHER SITUATION DURING APRIL 11-20, 2010

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